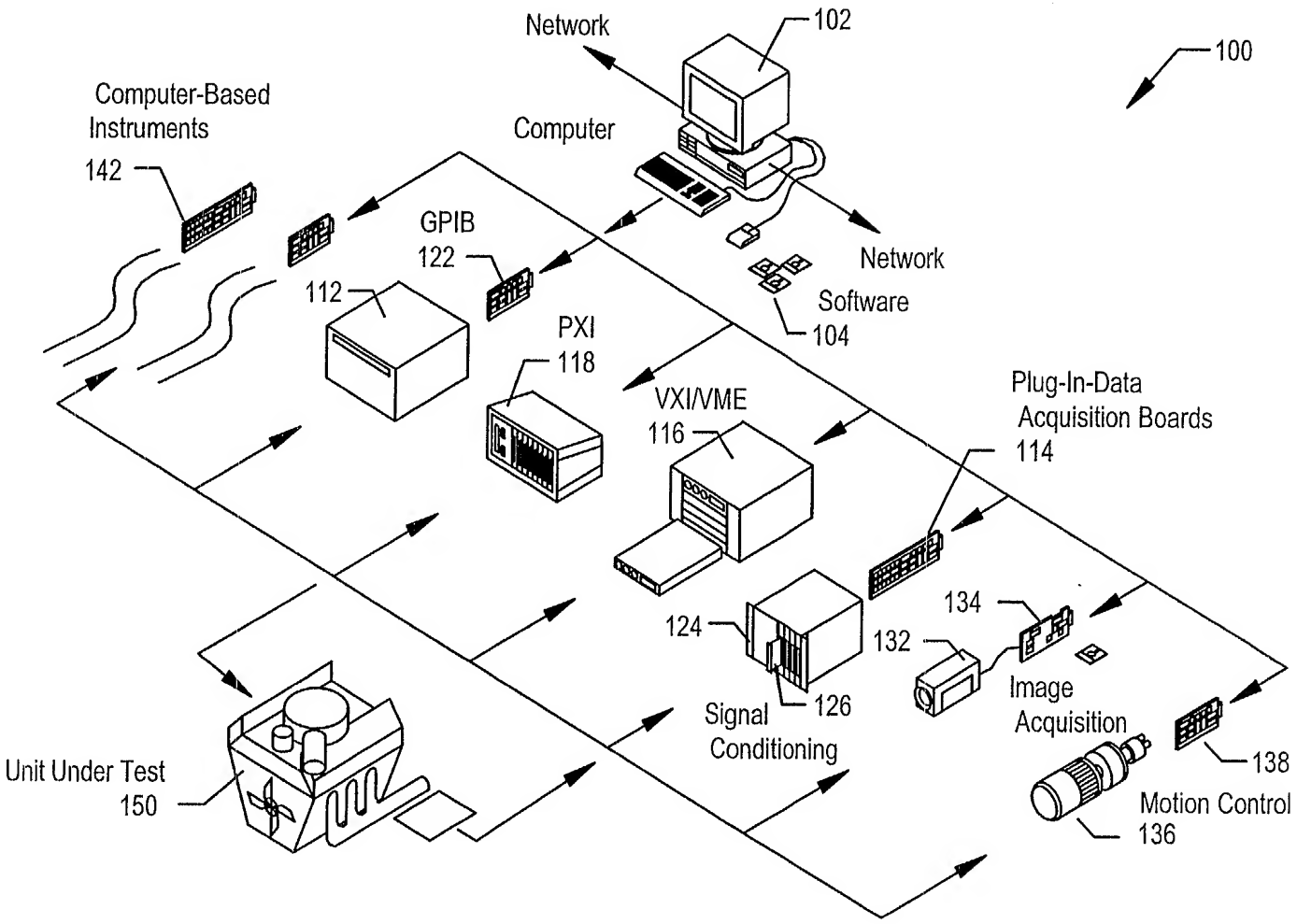

Network
102
100
Computer-Based
Instruments
142
Computer
GPIB
122
112
Network
Software
104
PXI
118
VXI/VME
116
Plug-In-Data
Acquisition Boards
114
134
124
132
Image
Acquisition
Signal
Conditioning
126
138
Unit Under Test
150
Motion Control
136

FIG. 1A

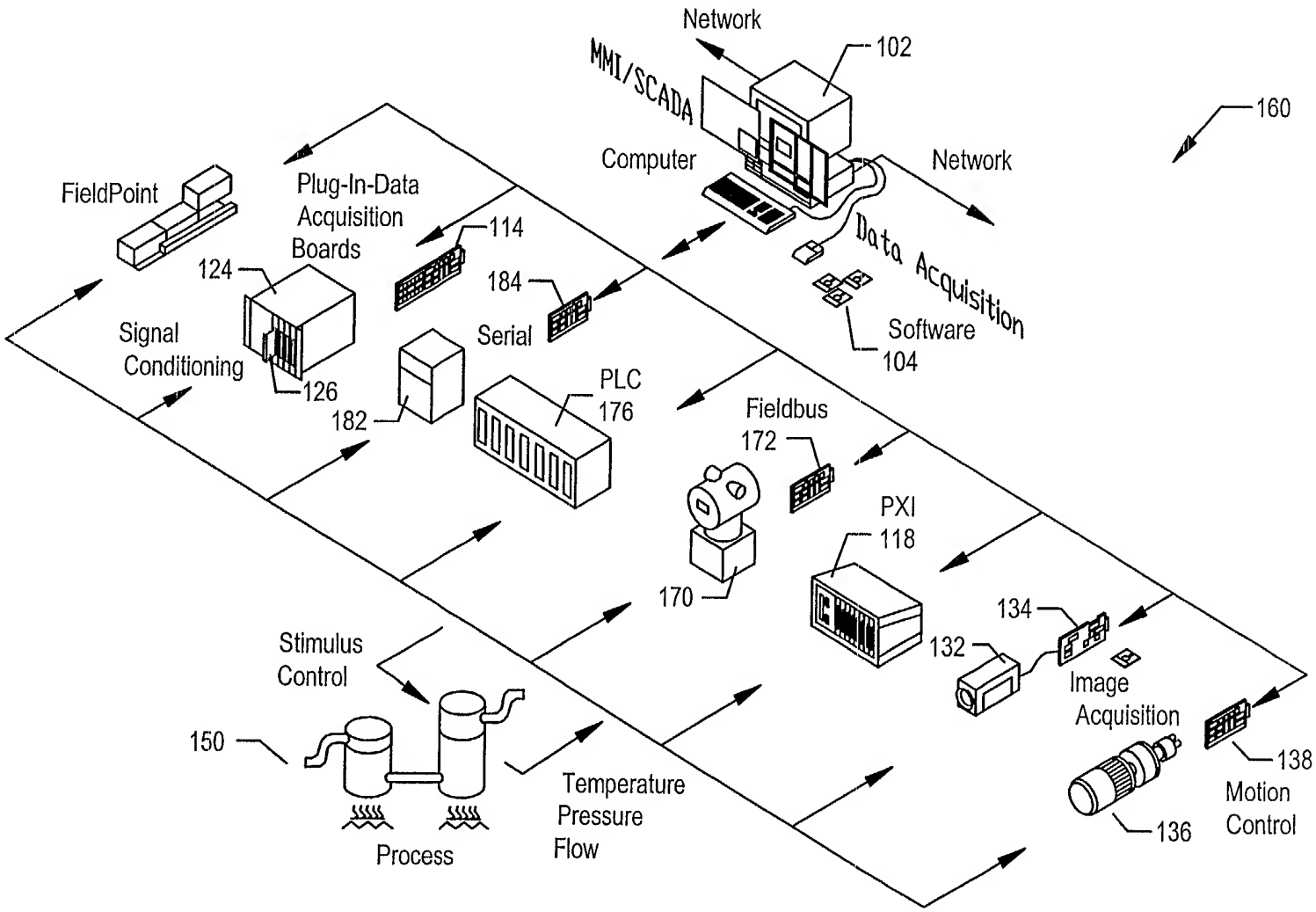

Network
102
MMI/SCADA
Computer
Network
160
FieldPoint
Plug-In-Data
Acquisition
Boards
114
124
184
Signal
Conditioning
Serial
Data Acquisition
Software
104
126
182
PLC
176
Fieldbus
172
PXI
118
170
134
132
Image
Acquisition
Stimulus
Control
150
138
Motion
Control
136
Temperature
Pressure
Flow
Process

FIG. 1B

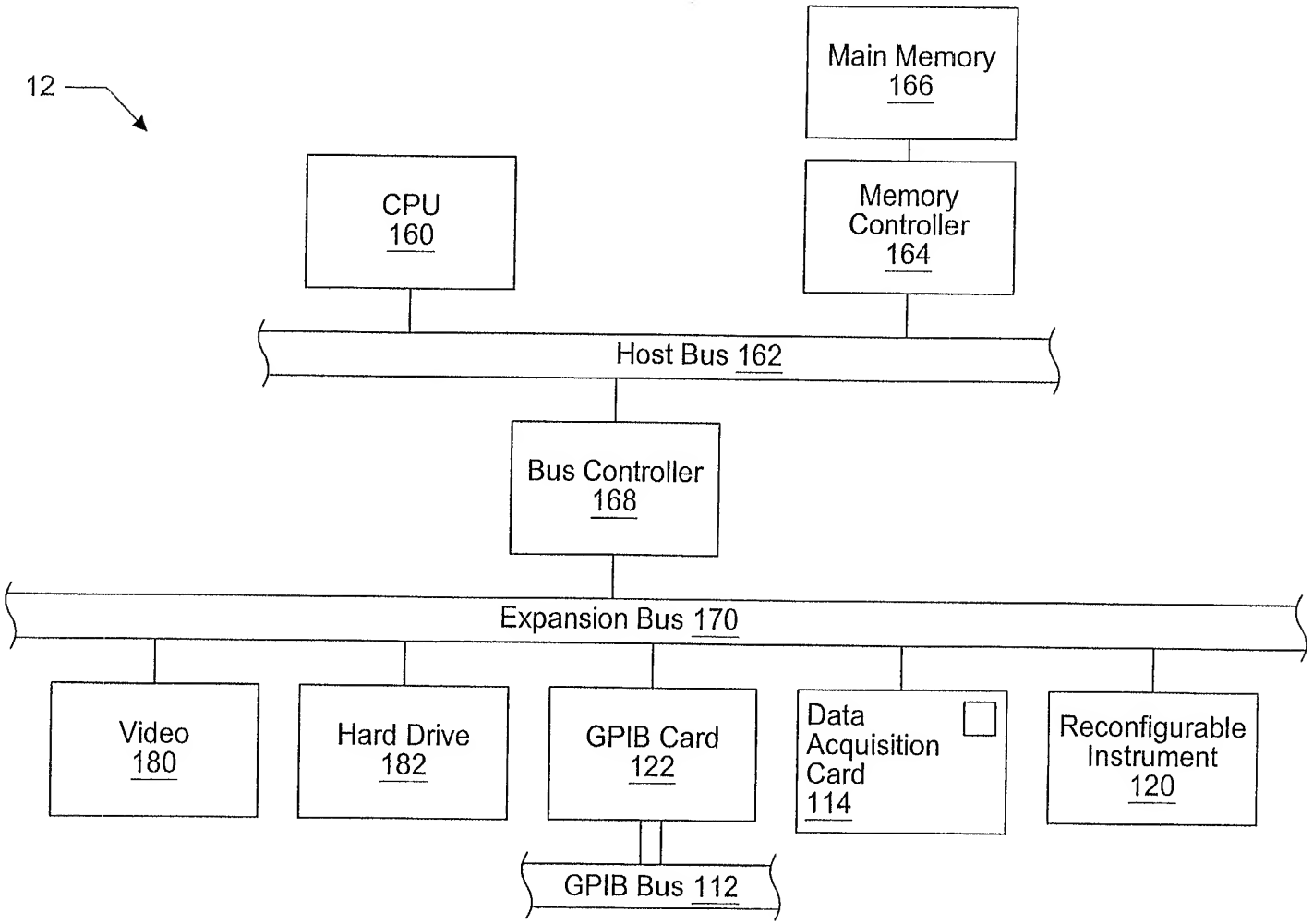

12
Main Memory
166
CPU
160
Memory
Controller
164
Host Bus 162
Bus Controller
168
Expansion Bus 170
Video
180
Hard Drive
182
GPIB Card
122
Data
Acquisition
Card
114
Reconfigurable
Instrument
120
GPIB Bus 112

Figure 2

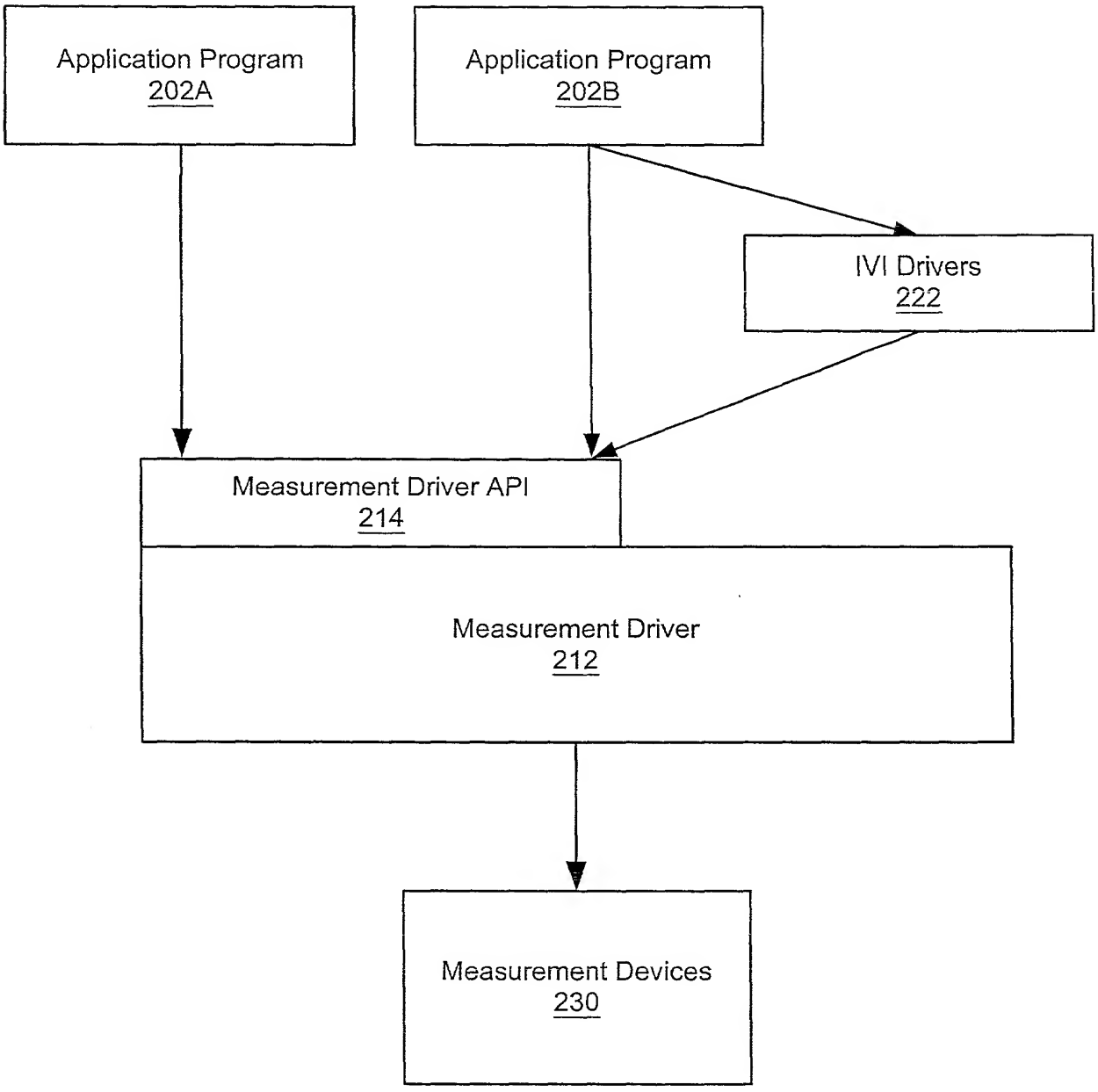

Application Program
202A
Application Program
202B
IVI Drivers
222
Measurement Driver API
214
Measurement Driver
212
Measurement Devices
230

Figure 3

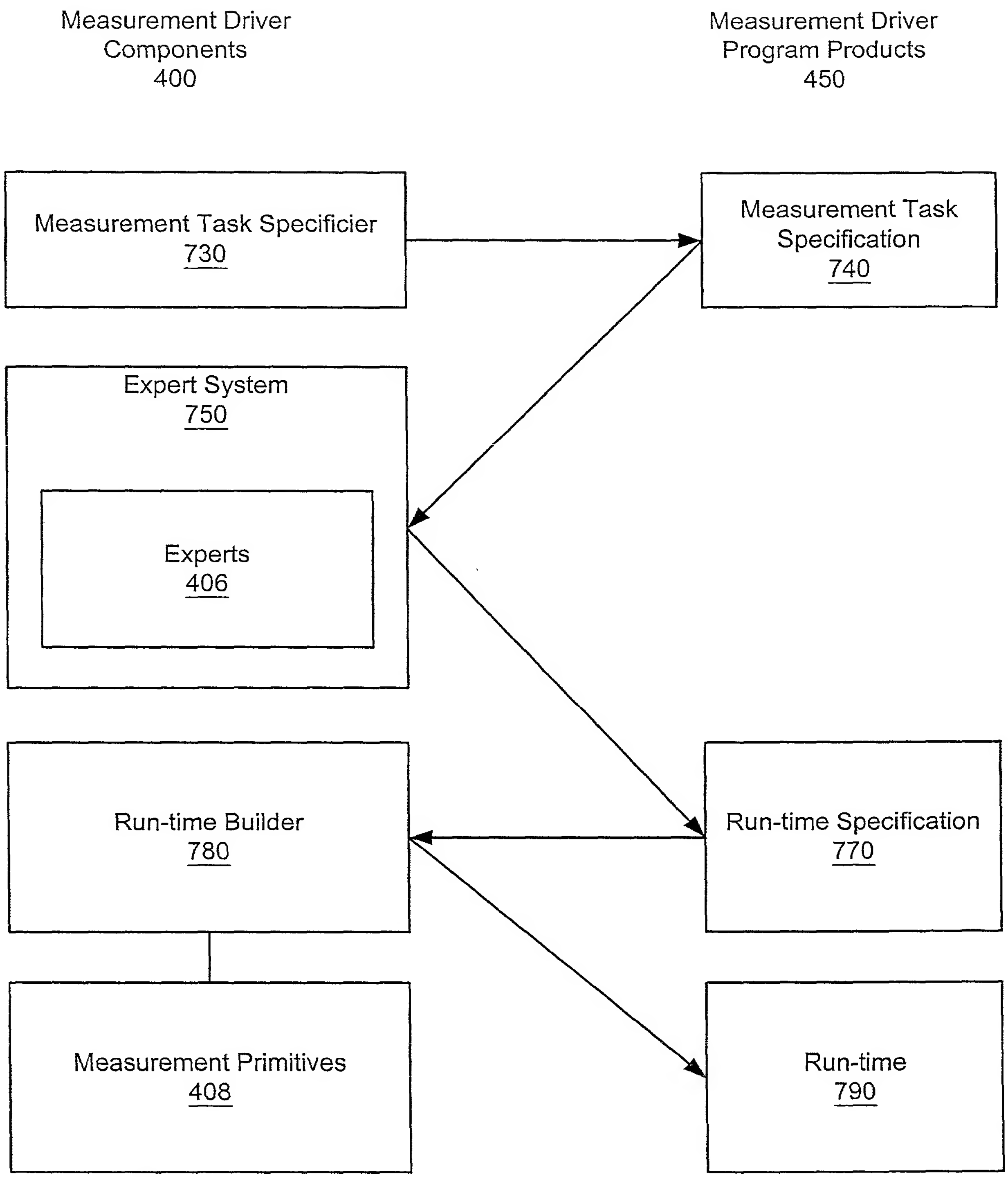

Measurement Driver Components
400
Measurement Driver Program Products
450
Measurement Task Specificier
730
Measurement Task Specification
740
Expert System
750
Experts
406
Run-time Builder
780
Run-time Specification
770
Measurement Primitives
408
Run-time
790

Figure 4

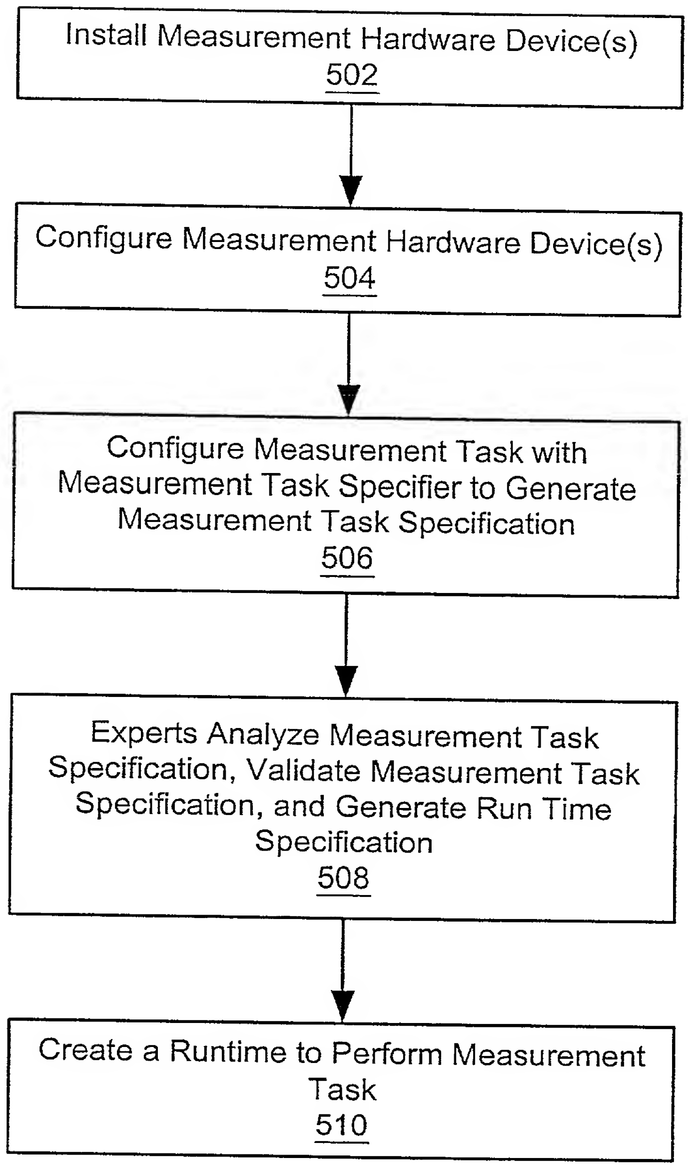
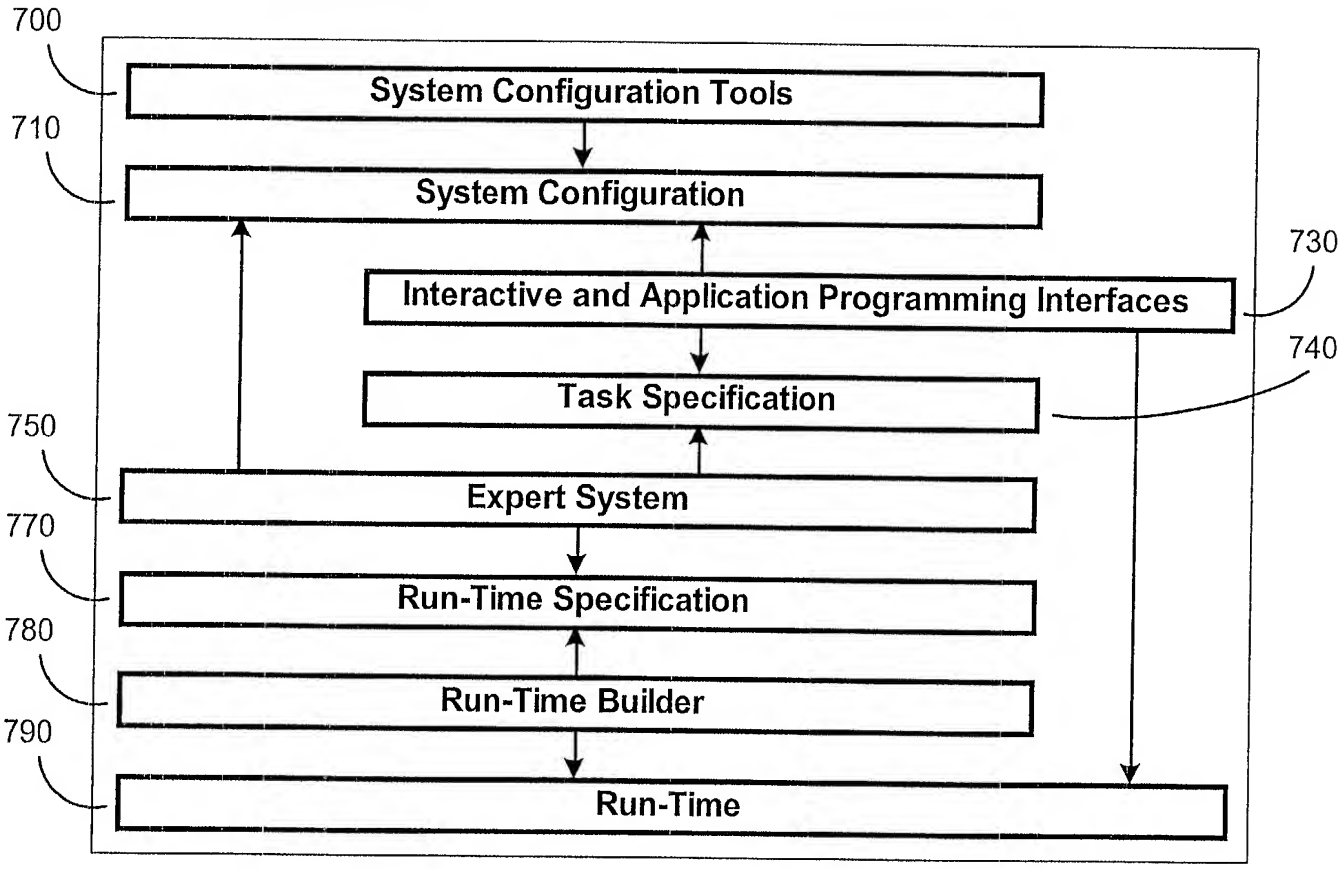

Install Measurement Hardware Device(s)
502
Configure Measurement Hardware Device(s)
504
Configure Measurement Task with Measurement Task Specifier to Generate Measurement Task Specification
506
Experts Analyze Measurement Task Specification, Validate Measurement Task Specification, and Generate Run Time Specification
508
Create a Runtime to Perform Measurement Task
510

Figure 5



High-Level Architecture

Figure 6

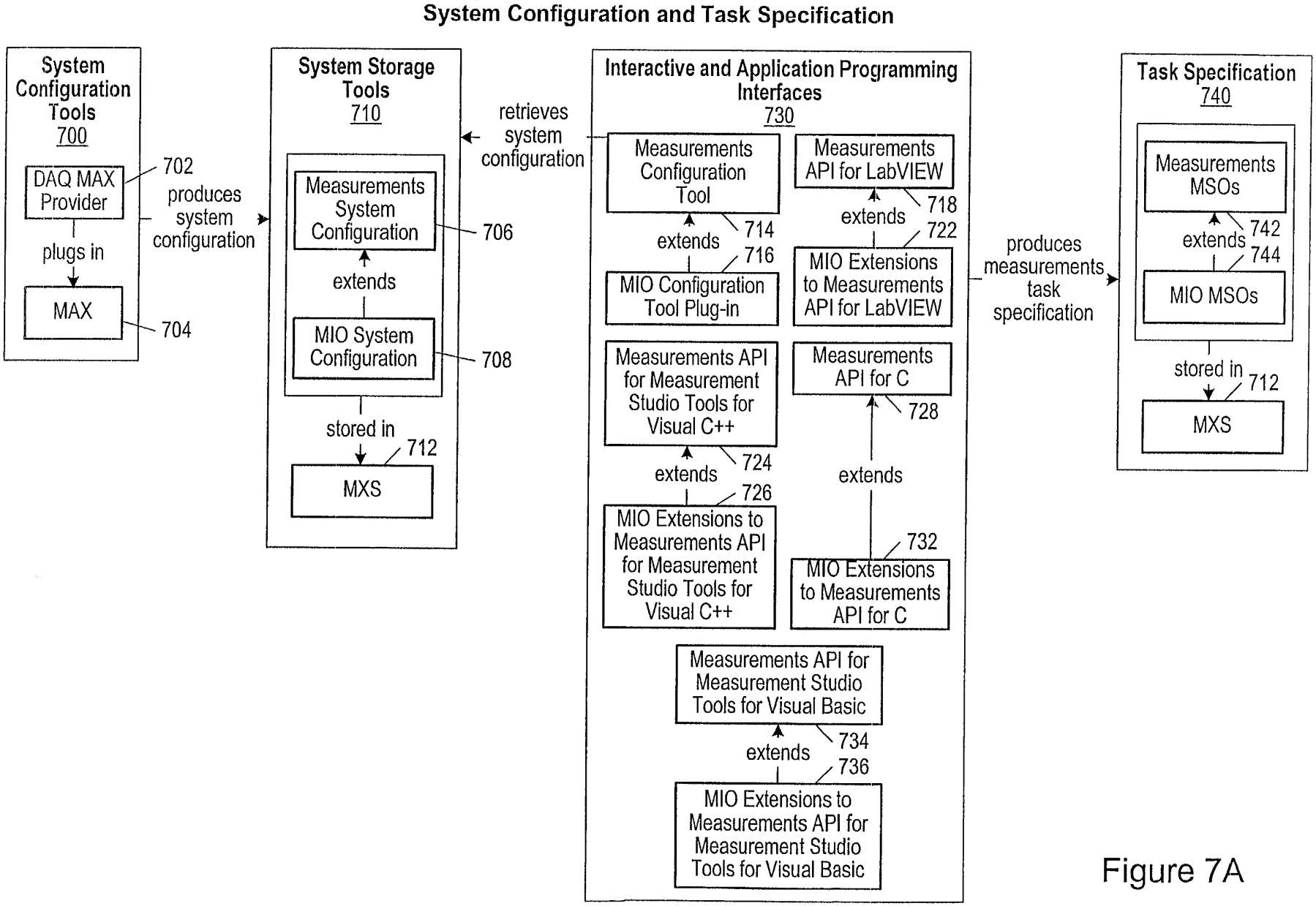

System Configuration and Task Specification
System Configuration Tools
700
DAQ MAX Provider
plugs in
MAX
704
702
produces system configuration
System Storage Tools
710
Measurements System Configuration
706
extends
MIO System Configuration
708
stored in
712
MXS
retrieves system configuration
Interactive and Application Programming Interfaces
730
Measurements Configuration Tool
714
extends
MIO Configuration Tool Plug-in
716
Measurements API for LabVIEW
718
extends
MIO Extensions to Measurements API for LabVIEW
722
Measurements API for Measurement Studio Tools for Visual C++
724
extends
MIO Extensions to Measurements API for Measurement Studio Tools for Visual C++
726
Measurements API for C
728
extends
MIO Extensions to Measurements API for C
732
Measurements API for Measurement Studio Tools for Visual Basic
734
extends
MIO Extensions to Measurements API for Measurement Studio Tools for Visual Basic
736
produces measurements task specification
Task Specification
740
Measurements MSOs
742
extends
MIO MSOs
744
stored in
712
MXS

Figure 7A

Compiling Task Specification to Task Run-time Specification

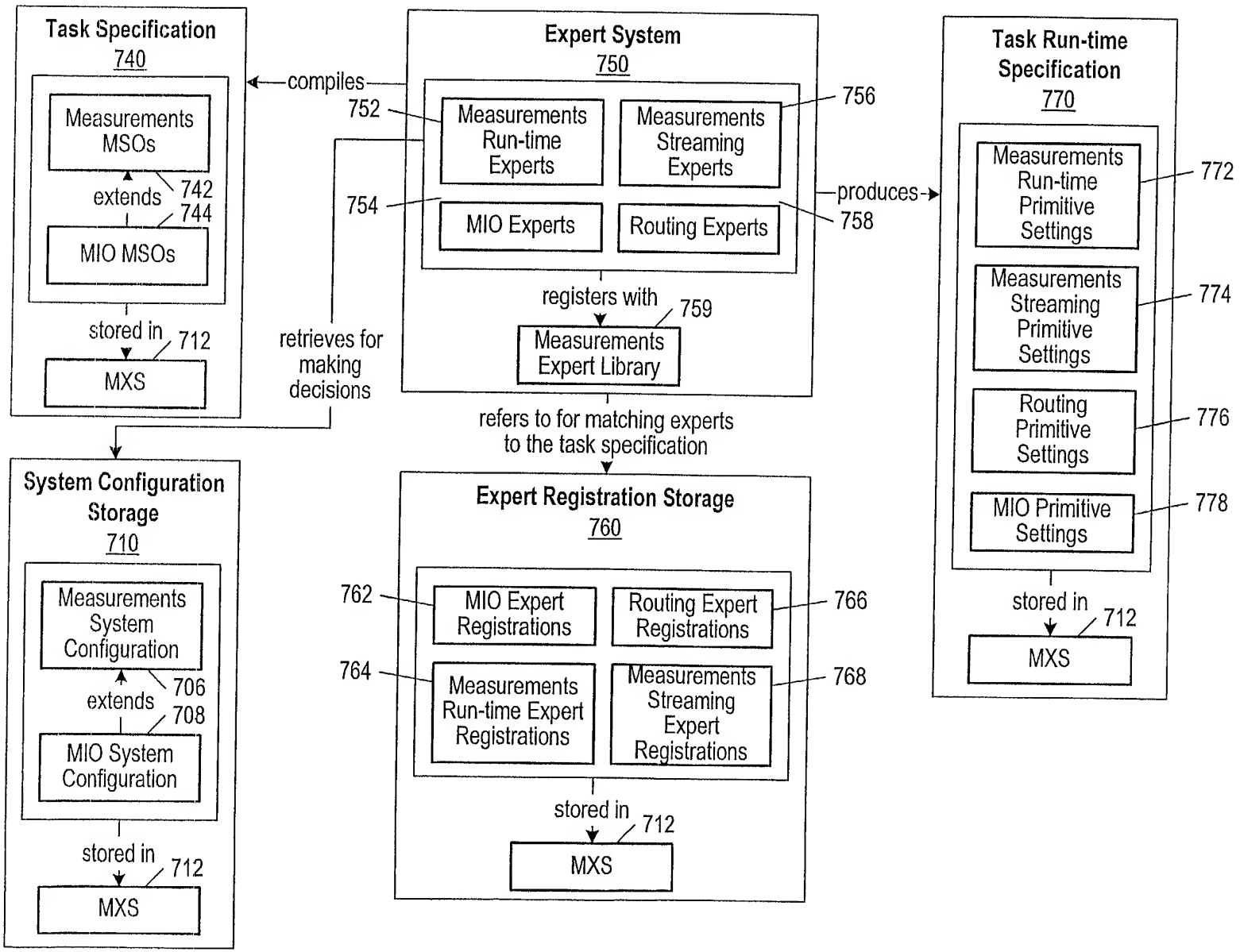


Figure 7B

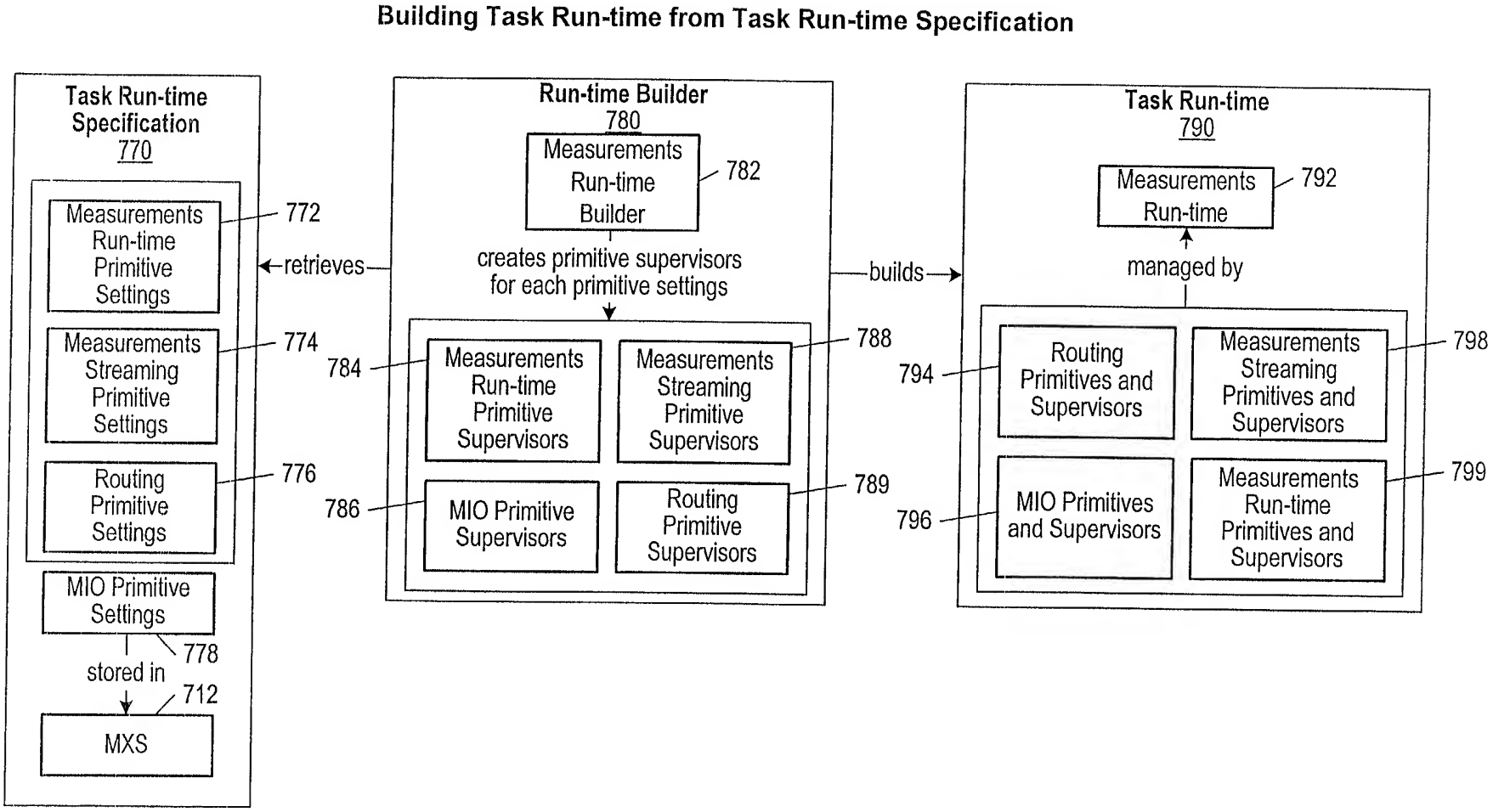

Building Task Run-time from Task Run-time Specification
Task Run-time Specification
770
Measurements Run-time Primitive Settings
772
retrieves
Measurements Streaming Primitive Settings
774
Routing Primitive Settings
776
MIO Primitive Settings
778
stored in
712
MXS
Run-time Builder
780
Measurements Run-time Builder
782
creates primitive supervisors for each primitive settings
784
Measurements Run-time Primitive Supervisors
Measurements Streaming Primitive Supervisors
788
786
MIO Primitive Supervisors
Routing Primitive Supervisors
789
builds
Task Run-time
790
Measurements Run-time
792
managed by
794
Routing Primitives and Supervisors
Measurements Streaming Primitives and Supervisors
798
796
MIO Primitives and Supervisors
Measurements Run-time Primitives and Supervisors
799

Figure 7C

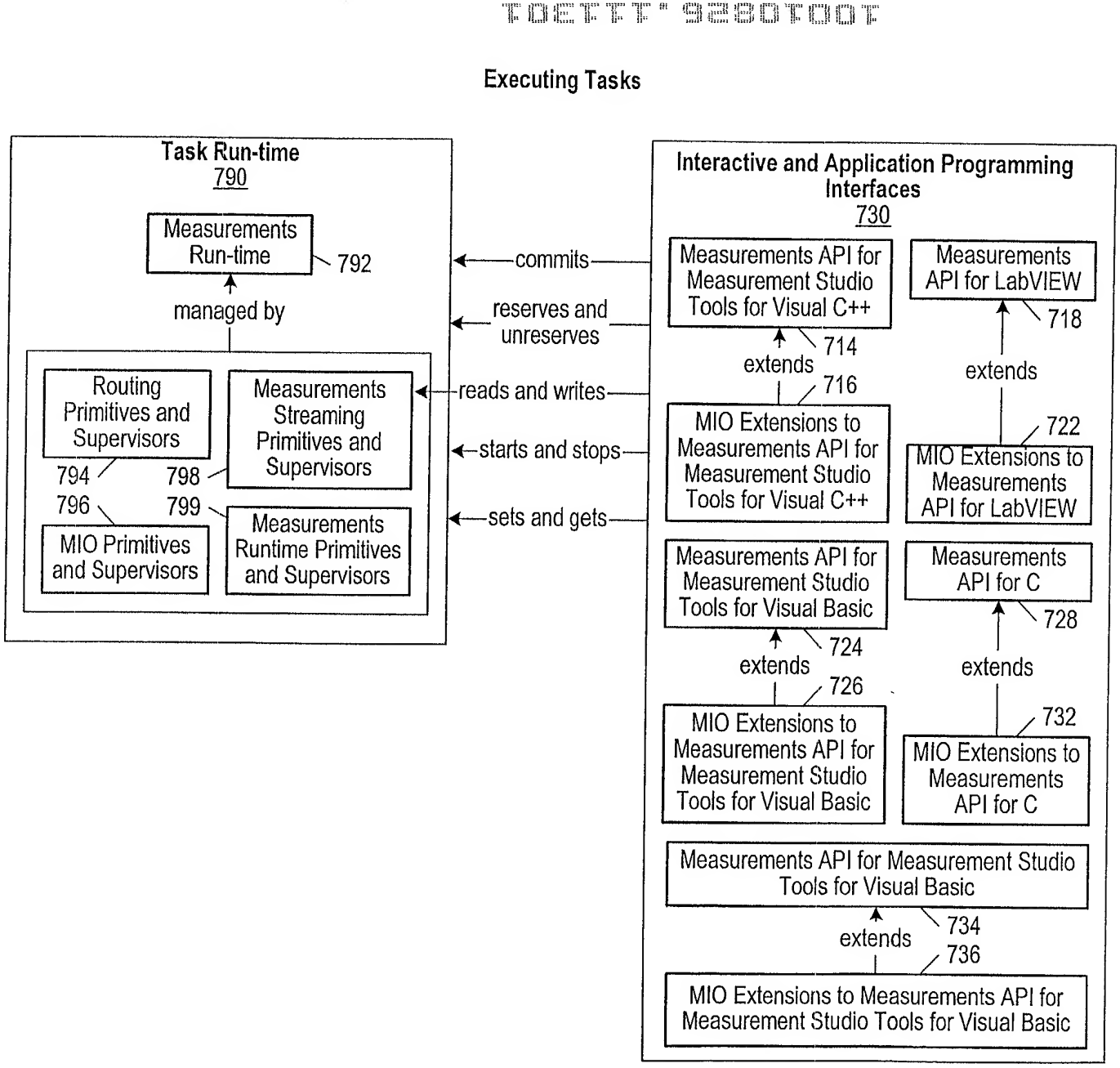

Executing Tasks
Task Run-time
790
Measurements Run-time
792
managed by
Routing Primitives and Supervisors
794
Measurements Streaming Primitives and Supervisors
798
796
MIO Primitives and Supervisors
799
Measurements Runtime Primitives and Supervisors
commits
reserves and unreserves
reads and writes
starts and stops
sets and gets
Interactive and Application Programming Interfaces
730
Measurements API for Measurement Studio Tools for Visual C++
714
Measurements API for LabVIEW
718
extends
716
extends
722
MIO Extensions to Measurements API for Measurement Studio Tools for Visual C++
MIO Extensions to Measurements API for LabVIEW
Measurements API for Measurement Studio Tools for Visual Basic
724
Measurements API for C
728
extends
726
extends
732
MIO Extensions to Measurements API for Measurement Studio Tools for Visual Basic
MIO Extensions to Measurements API for C
Measurements API for Measurement Studio Tools for Visual Basic
734
extends
736
MIO Extensions to Measurements API for Measurement Studio Tools for Visual Basic

Figure 7D

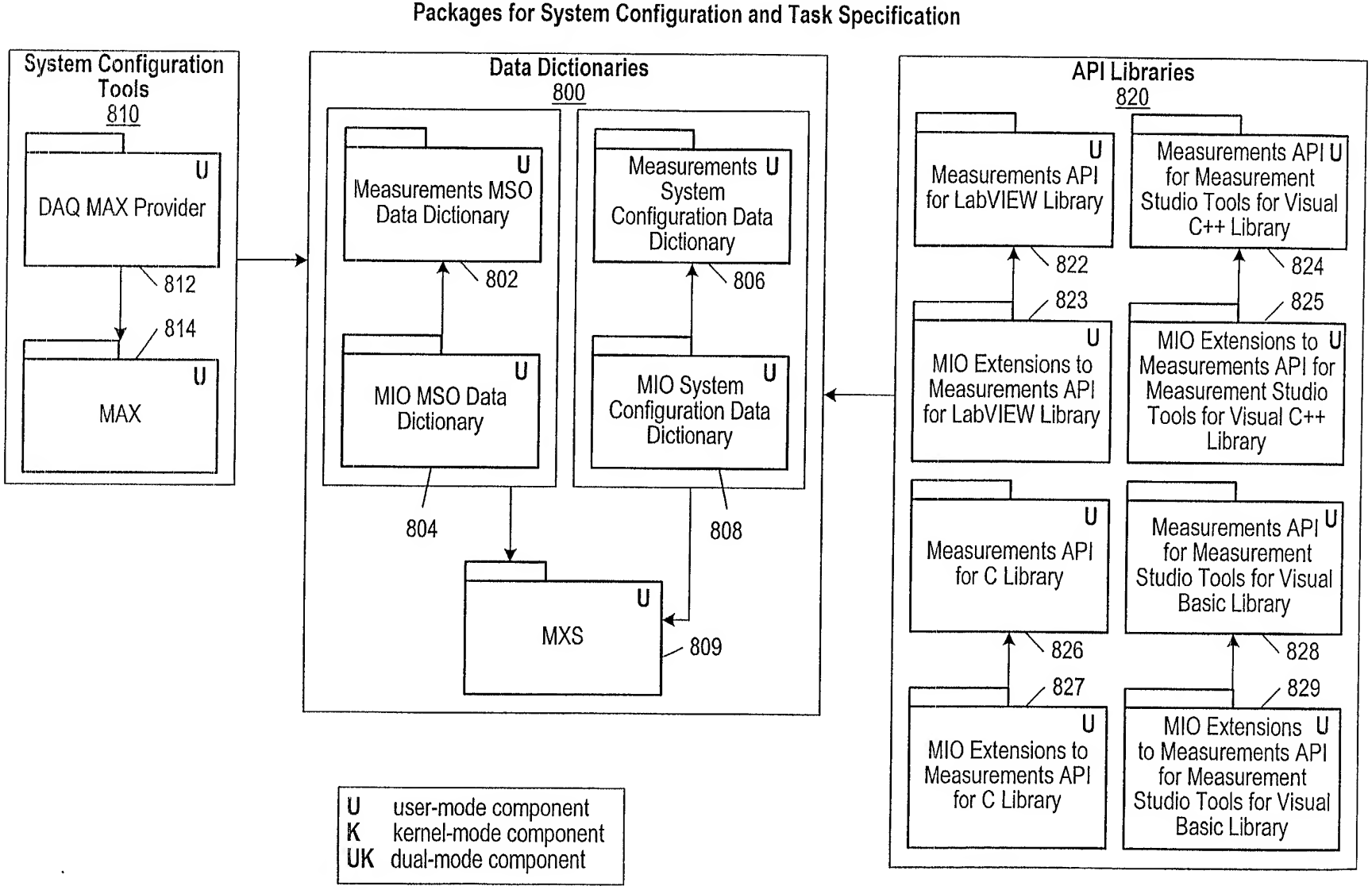

Packages for System Configuration and Task Specification
System Configuration Tools
810
U
DAQ MAX Provider
812
814
U
MAX
Data Dictionaries
800
U
Measurements MSO Data Dictionary
802
Measurements U System Configuration Data Dictionary
806
U
MIO MSO Data Dictionary
U
MIO System Configuration Data Dictionary
804
808
U
MXS
809
API Libraries
820
U
Measurements API for LabVIEW Library
822
Measurements API U for Measurement Studio Tools for Visual C++ Library
824
823
825
U
MIO Extensions to Measurements API for LabVIEW Library
MIO Extensions to U Measurements API for Measurement Studio Tools for Visual C++ Library
U
Measurements API for C Library
Measurements API U for Measurement Studio Tools for Visual Basic Library
826
828
827
829
U
MIO Extensions to Measurements API for C Library
MIO Extensions U to Measurements API for Measurement Studio Tools for Visual Basic Library
U user-mode component
K kernel-mode component
UK dual-mode component

Figure 8A

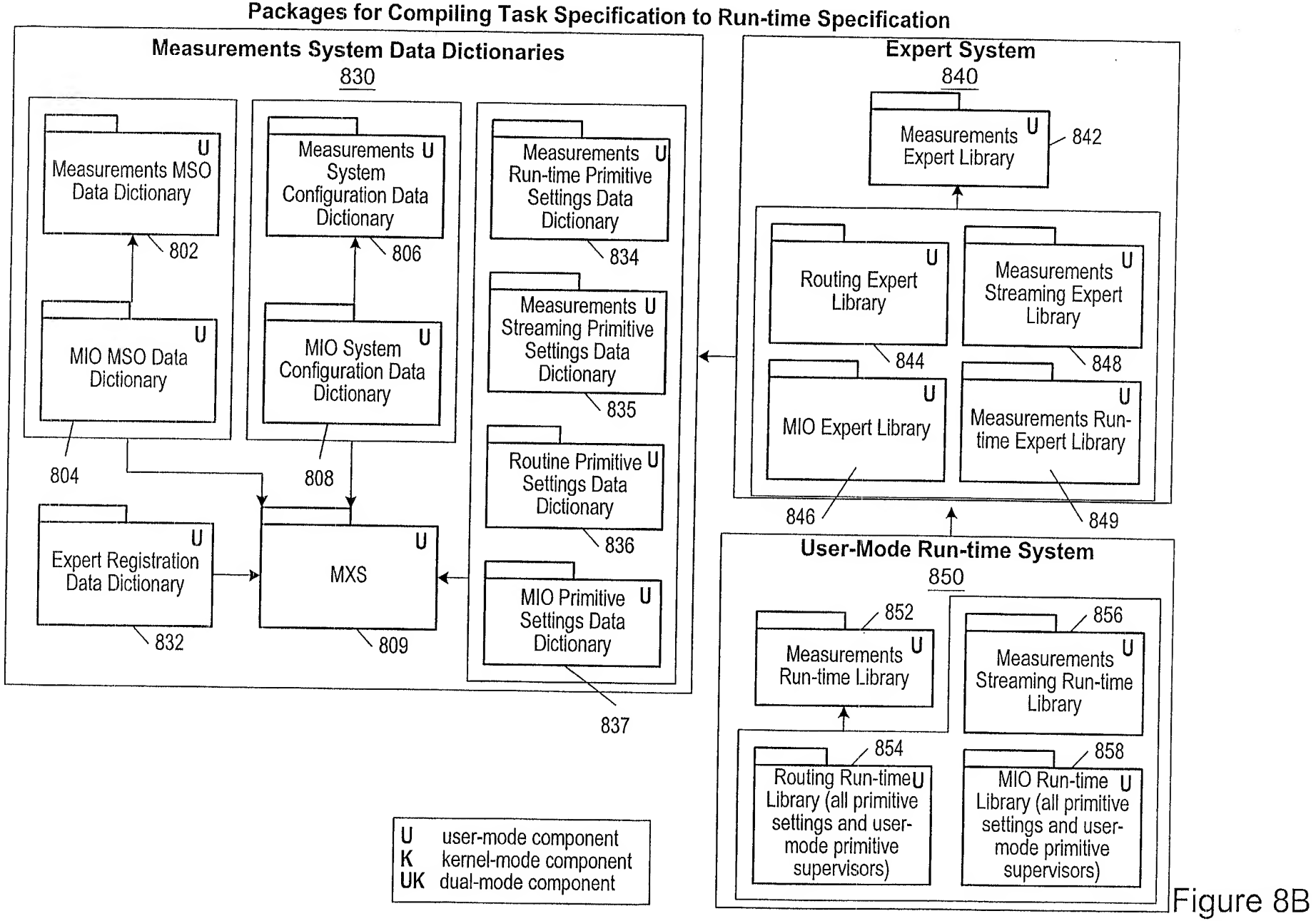

Packages for Compiling Task Specification to Run-time Specification
Measurements System Data Dictionaries
830
U
Measurements MSO Data Dictionary
802
U
MIO MSO Data Dictionary
804
Measurements U System Configuration Data Dictionary
806
U
MIO System Configuration Data Dictionary
808
Measurements U Run-time Primitive Settings Data Dictionary
834
Measurements U Streaming Primitive Settings Data Dictionary
835
Routine Primitive U Settings Data Dictionary
836
MIO Primitive U Settings Data Dictionary
837
U
Expert Registration Data Dictionary
832
U
MXS
809
Expert System
840
Measurements U Expert Library
842
U
Routing Expert Library
844
Measurements U Streaming Expert Library
848
U
MIO Expert Library
846
U
Measurements Run-time Expert Library
849
User-Mode Run-time System
850
852
Measurements U Run-time Library
856
Measurements U Streaming Run-time Library
854
Routing Run-time U Library (all primitive settings and user-mode primitive supervisors)
858
MIO Run-time U Library (all primitive settings and user-mode primitive supervisors)
U user-mode component
K kernel-mode component
UK dual-mode component

Figure 8B

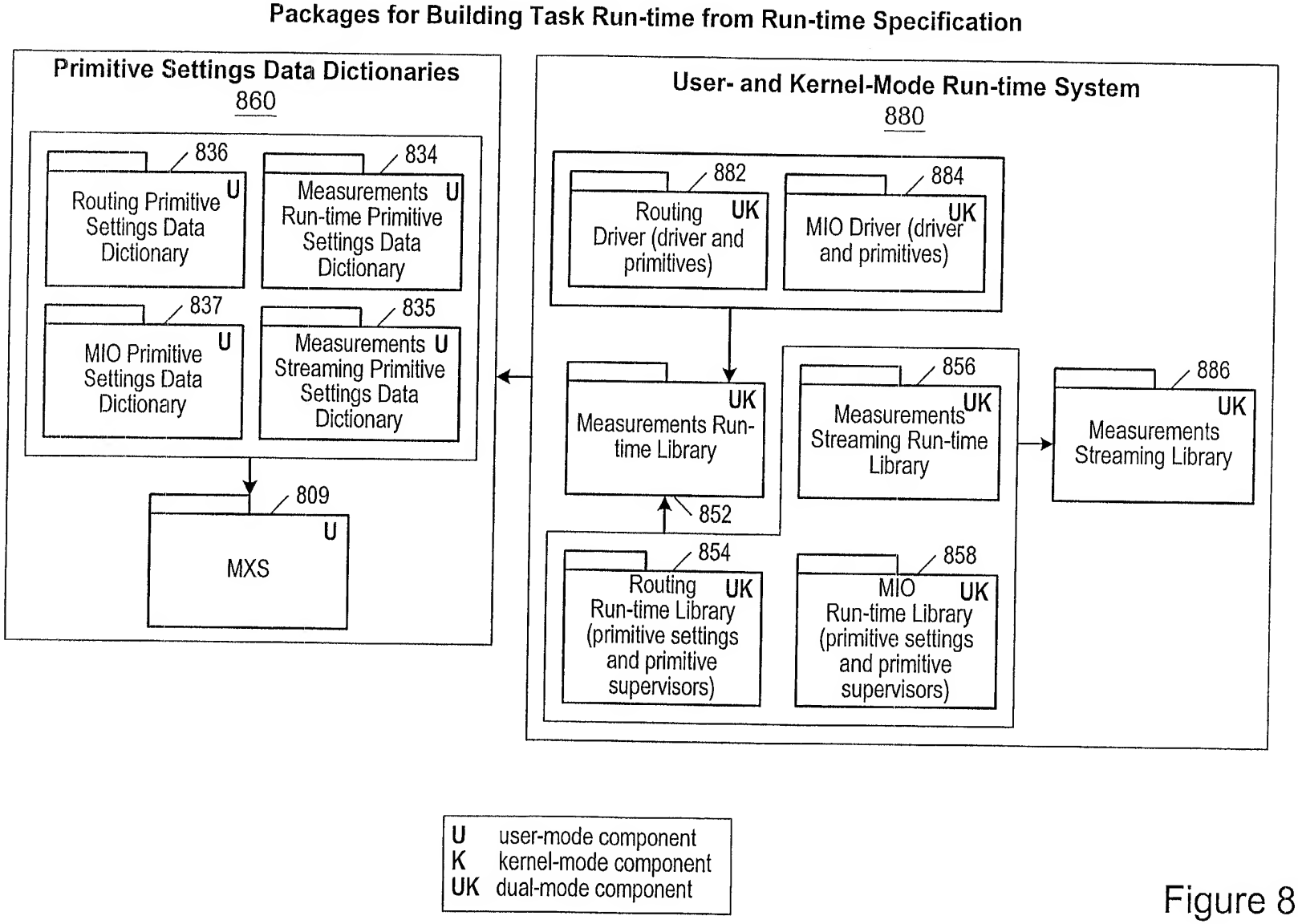

Packages for Building Task Run-time from Run-time Specification
Primitive Settings Data Dictionaries
860
836
Routing Primitive Settings Data Dictionary
U
834
Measurements Run-time Primitive Settings Data Dictionary
U
837
MIO Primitive Settings Data Dictionary
U
835
Measurements Streaming Primitive Settings Data Dictionary
U
809
MXS
U
User- and Kernel-Mode Run-time System
880
882
Routing Driver (driver and primitives)
UK
884
MIO Driver (driver and primitives)
UK
UK
Measurements Run-time Library
852
856
Measurements Streaming Run-time Library
UK
886
Measurements Streaming Library
UK
854
Routing Run-time Library (primitive settings and primitive supervisors)
UK
858
MIO Run-time Library (primitive settings and primitive supervisors)
UK
U user-mode component
K kernel-mode component
UK dual-mode component

Figure 8C

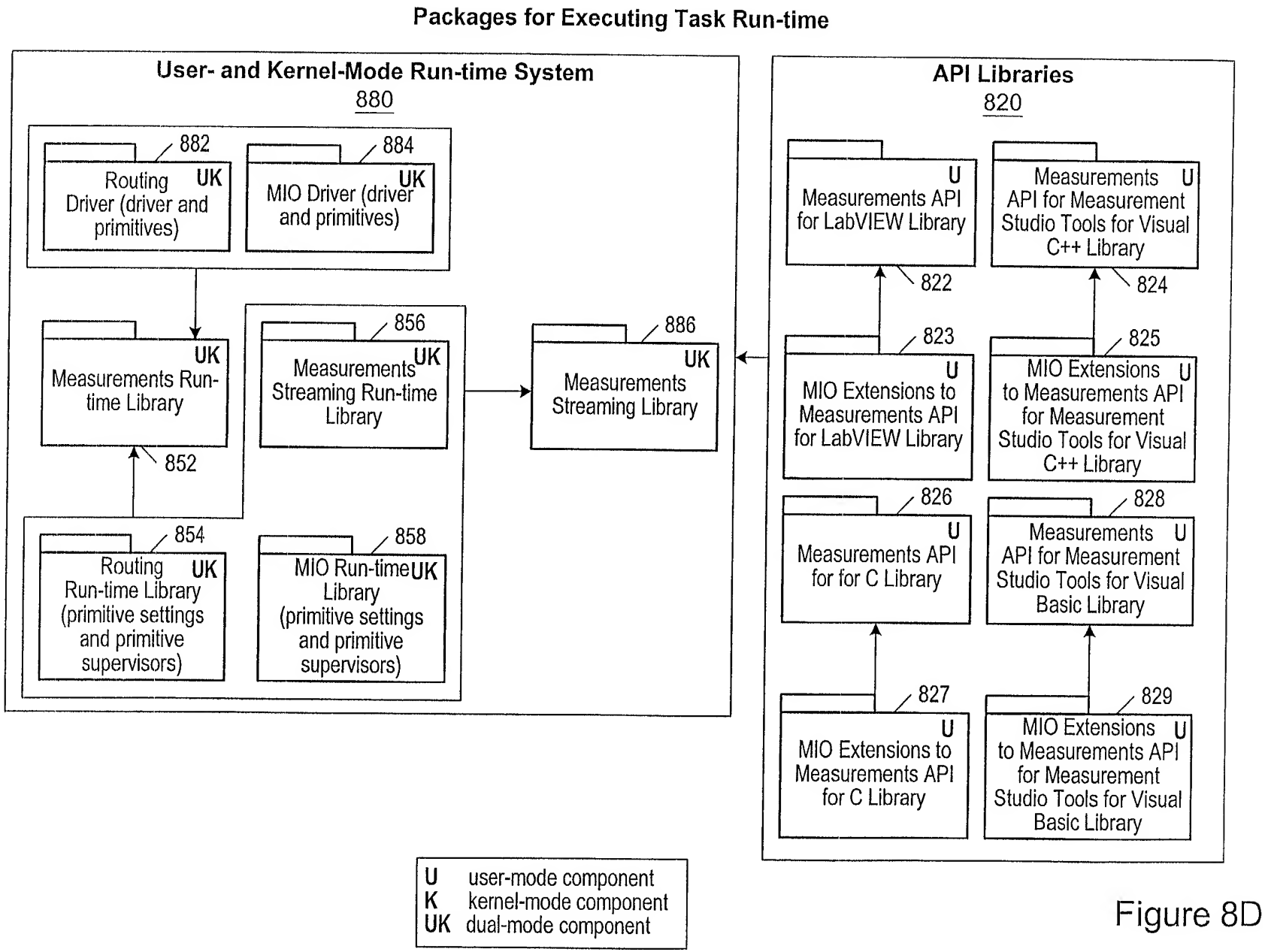

Packages for Executing Task Run-time
User- and Kernel-Mode Run-time System
880
882
Routing Driver (driver and primitives)
UK
884
MIO Driver (driver and primitives)
UK
856
Measurements Streaming Run-time Library
UK
886
Measurements Streaming Library
UK
Measurements Run-time Library
UK
852
854
Routing Run-time Library (primitive settings and primitive supervisors)
UK
858
MIO Run-time Library (primitive settings and primitive supervisors)
UK
API Libraries
820
U
Measurements API for LabVIEW Library
822
Measurements API for Measurement Studio Tools for Visual C++ Library
U
824
823
U
MIO Extensions to Measurements API for LabVIEW Library
825
MIO Extensions to Measurements API for Measurement Studio Tools for Visual C++ Library
U
826
U
Measurements API for for C Library
828
Measurements API for Measurement Studio Tools for Visual Basic Library
U
827
U
MIO Extensions to Measurements API for C Library
829
MIO Extensions to Measurements API for Measurement Studio Tools for Visual Basic Library
U
U user-mode component
K kernel-mode component
UK dual-mode component

Figure 8D

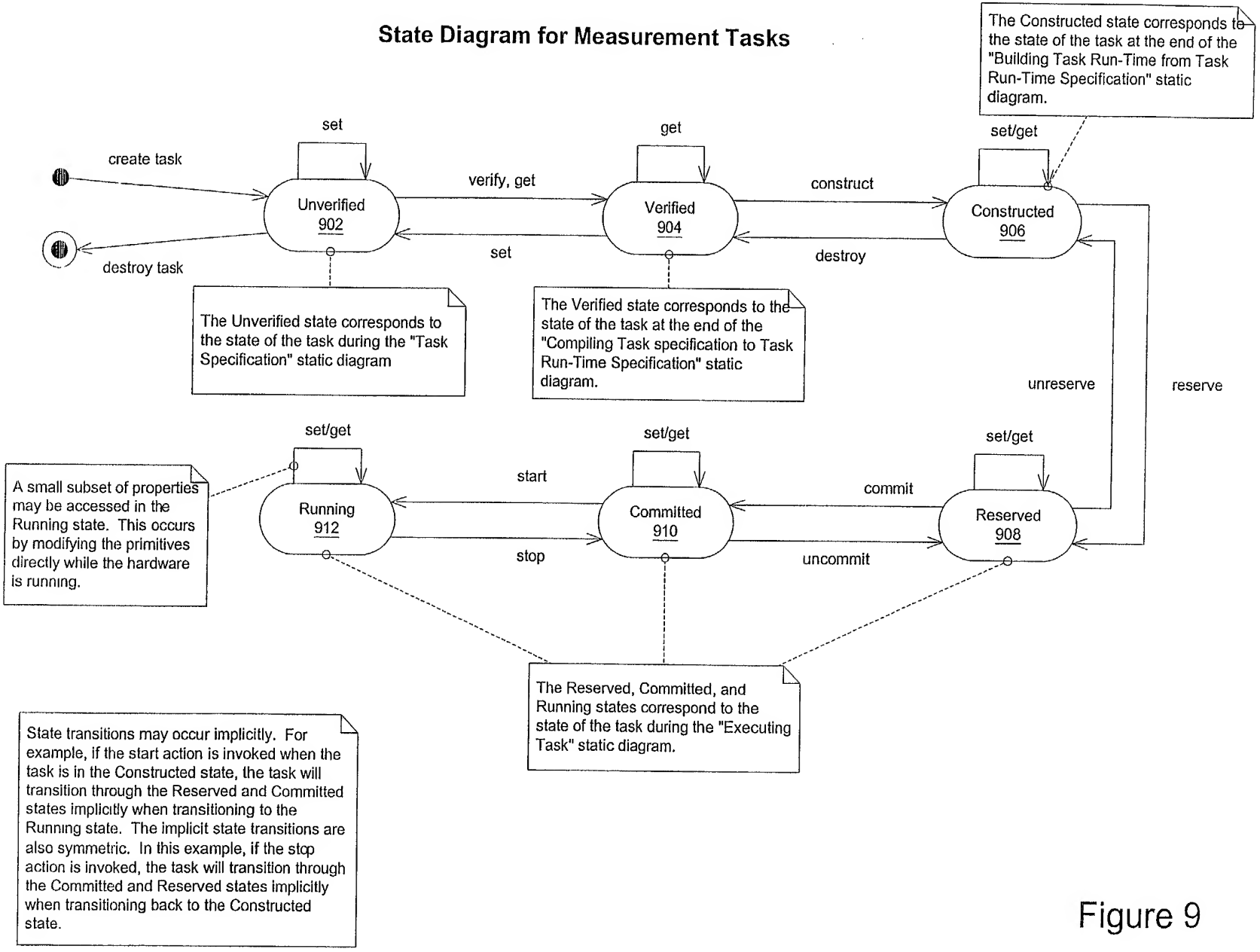

State Diagram for Measurement Tasks
The Constructed state corresponds to the state of the task at the end of the "Building Task Run-Time from Task Run-Time Specification" static diagram.
set
get
set/get
create task
verify, get
construct
Unverified
902
Verified
904
Constructed
906
destroy task
set
destroy
The Unverified state corresponds to the state of the task during the "Task Specification" static diagram
The Verified state corresponds to the state of the task at the end of the "Compiling Task specification to Task Run-Time Specification" static diagram.
unreserve
reserve
set/get
set/get
set/get
A small subset of properties may be accessed in the Running state. This occurs by modifying the primitives directly while the hardware is running.
start
commit
Running
912
Committed
910
Reserved
908
stop
uncommit
The Reserved, Committed, and Running states correspond to the state of the task during the "Executing Task" static diagram.
State transitions may occur implicitly. For example, if the start action is invoked when the task is in the Constructed state, the task will transition through the Reserved and Committed states implicitly when transitioning to the Running state. The implicit state transitions are also symmetric. In this example, if the stop action is invoked, the task will transition through the Committed and Reserved states implicitly when transitioning back to the Constructed state.

Figure 9

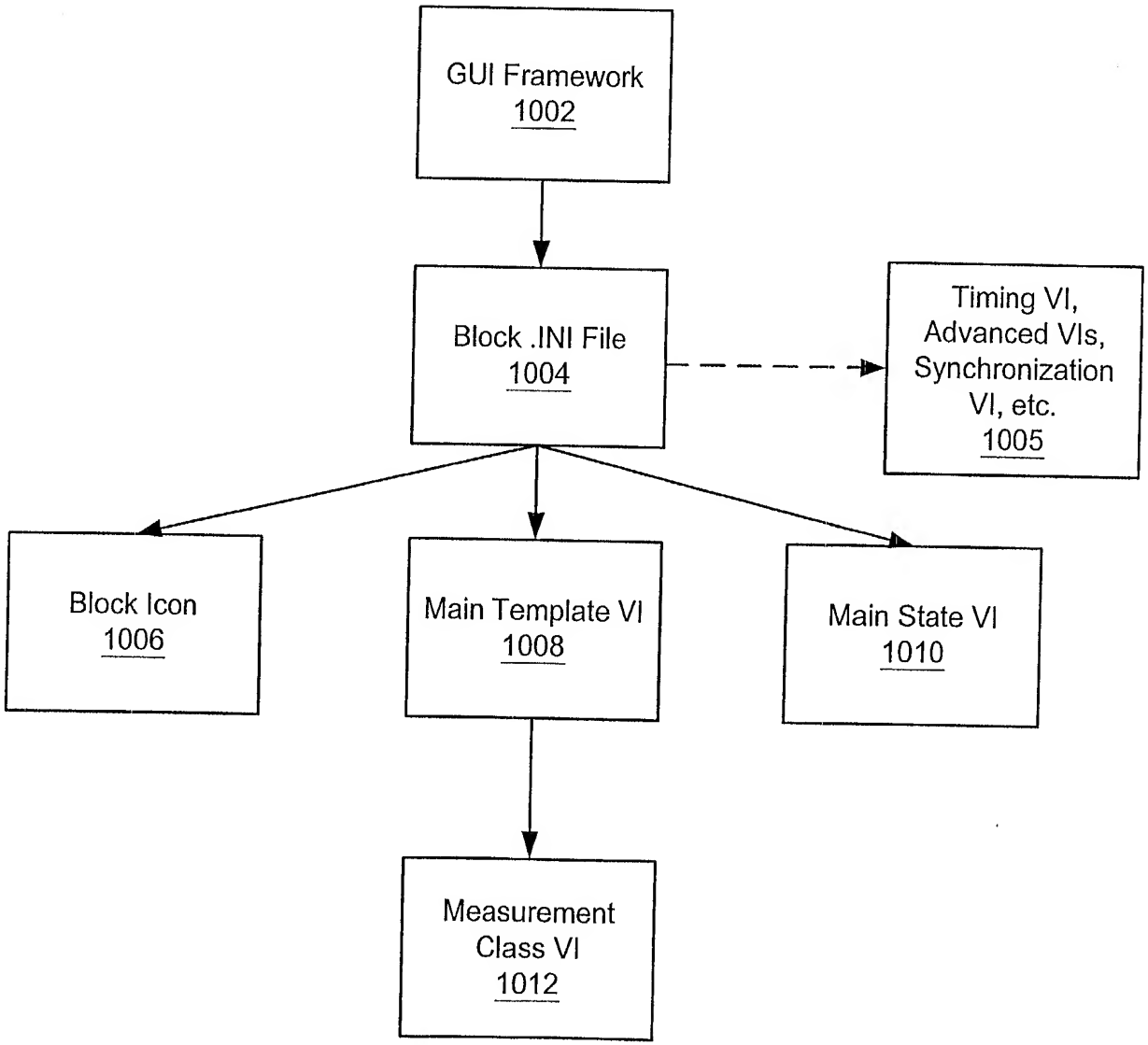

GUI Framework
1002
Block .INI File
1004
Timing VI,
Advanced VIs,
Synchronization
VI, etc.
1005
Block Icon
1006
Main Template VI
1008
Main State VI
1010
Measurement
Class VI
1012

Figure 10

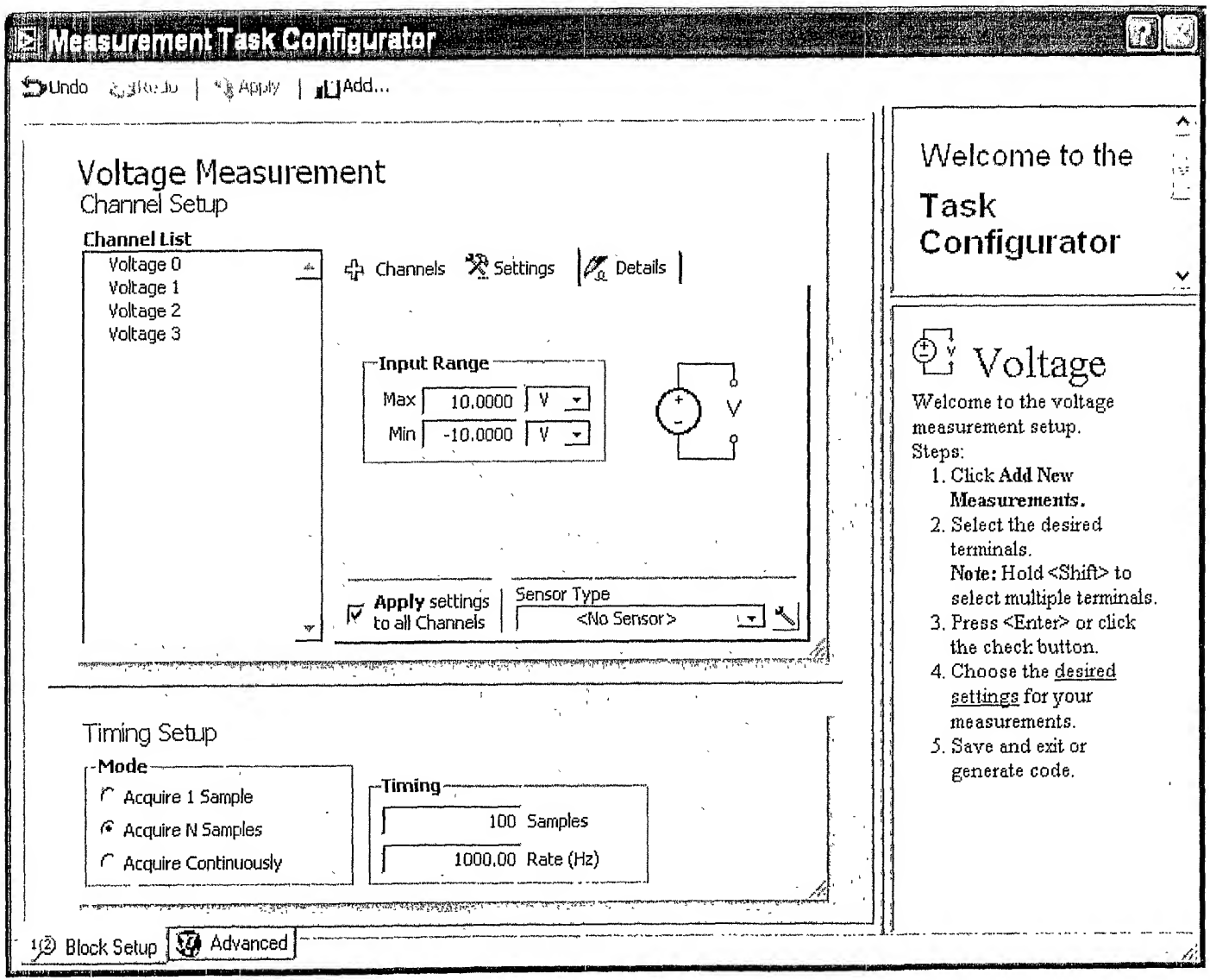

Measurement Task Configurator
Undo
Redo
Apply
Add...
Voltage Measurement
Channel Setup
Channel List
Voltage 0
Voltage 1
Voltage 2
Voltage 3
Channels
Settings
Details
Input Range
Max
10.0000
V
Min
-10.0000
V
Apply settings to all Channels
Sensor Type
<No Sensor>
Timing Setup
Mode
Acquire 1 Sample
Acquire N Samples
Acquire Continuously
Timing
100 Samples
1000.00 Rate (Hz)
Block Setup
Advanced
Welcome to the
Task Configurator
Voltage
Welcome to the voltage measurement setup.
Steps:
1. Click Add New Measurements.
2. Select the desired terminals.
Note: Hold <Shift> to select multiple terminals.
3. Press <Enter> or click the check button.
4. Choose the desired settings for your measurements.
5. Save and exit or generate code.

Figure 11

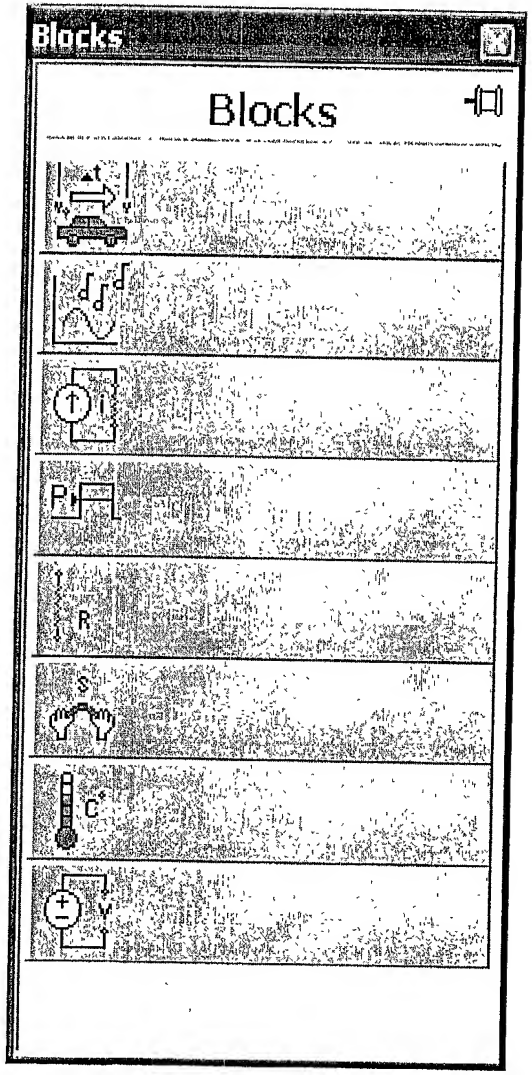


Figure 12A

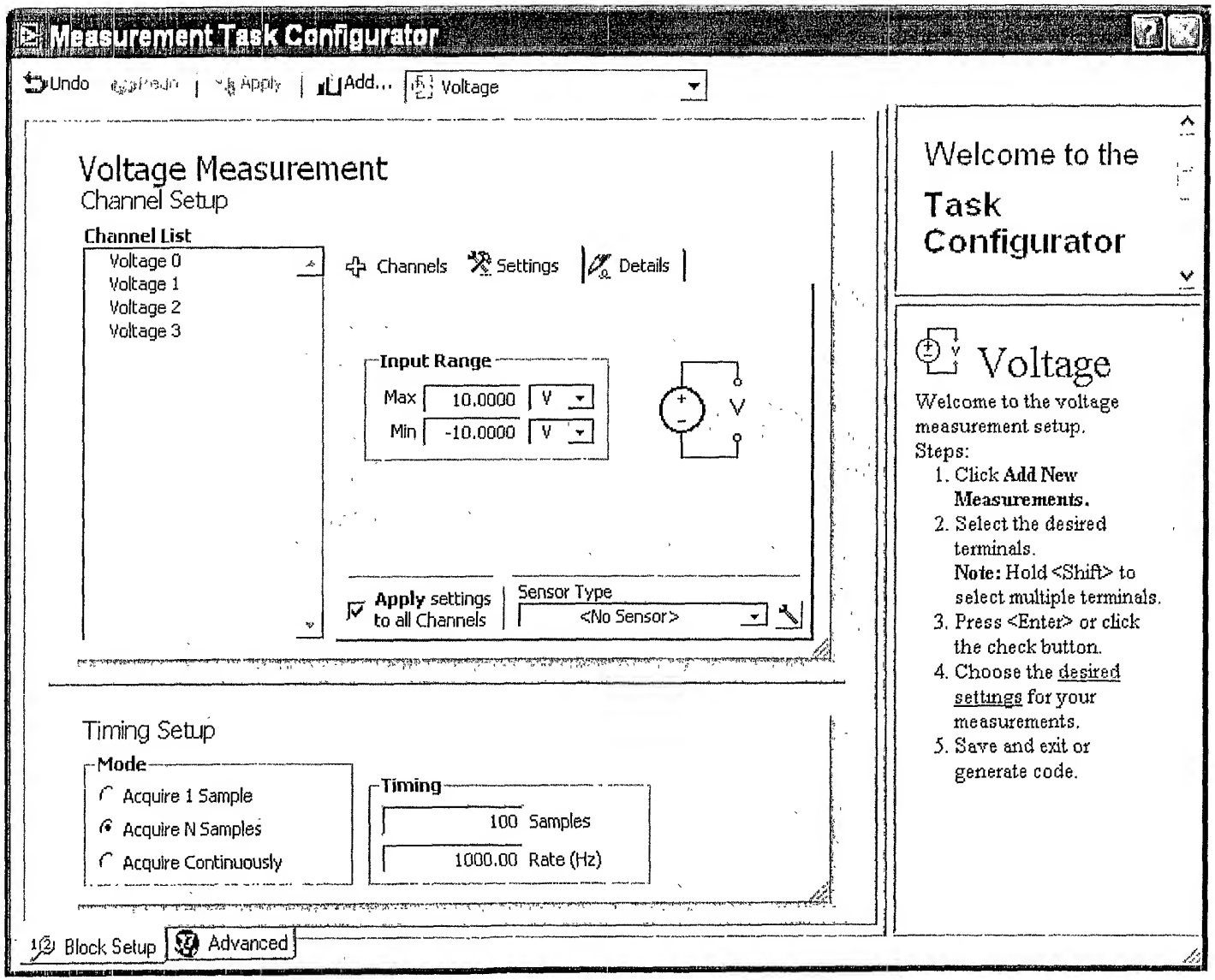

Measurement Task Configurator
Undo
Apply
Add...
Voltage
Voltage Measurement
Channel Setup
Channel List
Voltage 0
Voltage 1
Voltage 2
Voltage 3
Channels
Settings
Details
Input Range
Max
10.0000
V
Min
-10.0000
V
Apply settings to all Channels
Sensor Type
<No Sensor>
Timing Setup
Mode
Acquire 1 Sample
Acquire N Samples
Acquire Continuously
Timing
100 Samples
1000.00 Rate (Hz)
Block Setup
Advanced
Welcome to the
Task Configurator
Voltage
Welcome to the voltage measurement setup.
Steps:
1. Click Add New Measurements.
2. Select the desired terminals.
Note: Hold <Shift> to select multiple terminals.
3. Press <Enter> or click the check button.
4. Choose the desired settings for your measurements.
5. Save and exit or generate code.

Figure 12B

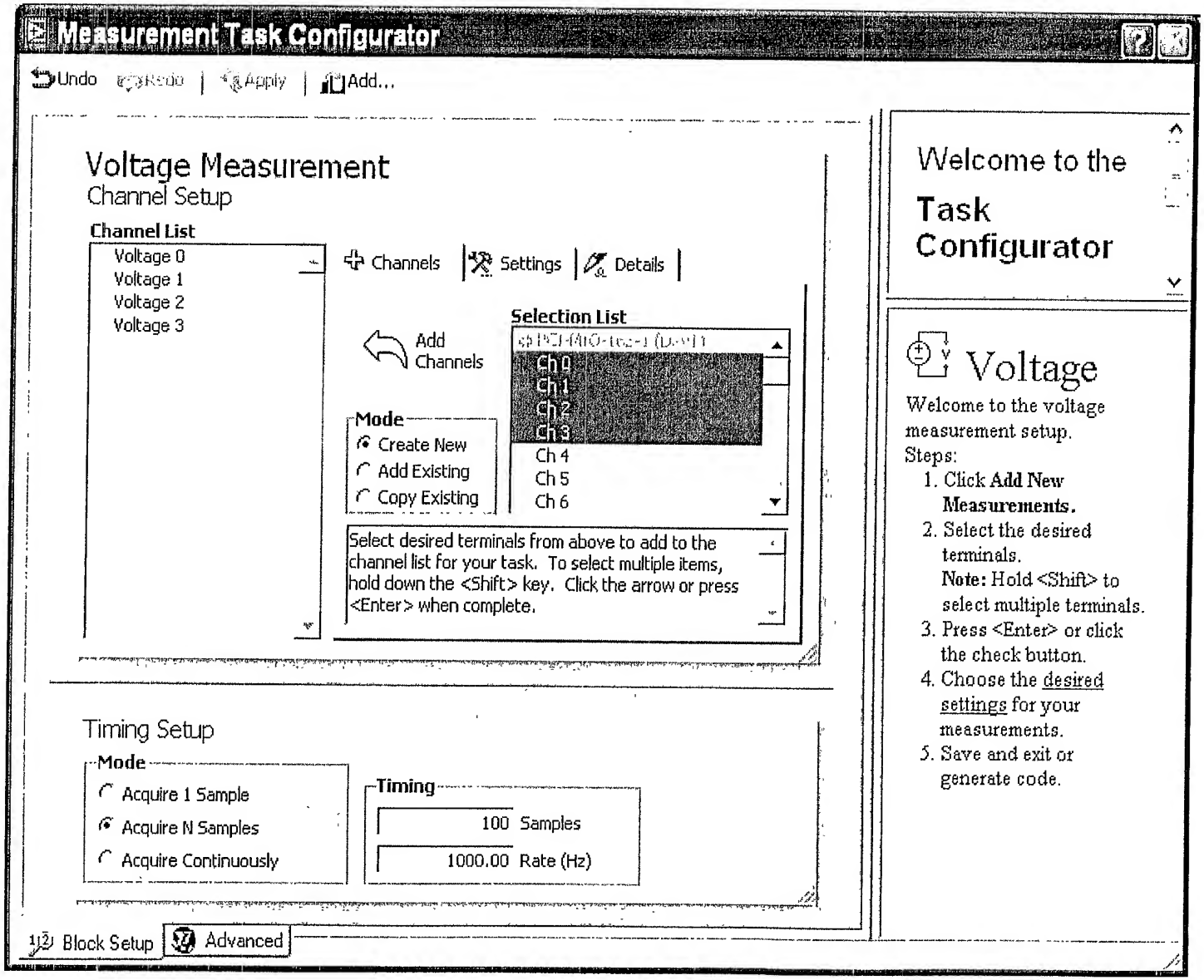

Measurement Task Configurator
Undo
Redo
Apply
Add...
Voltage Measurement
Channel Setup
Channel List
Voltage 0
Voltage 1
Voltage 2
Voltage 3
Channels
Settings
Details
Add Channels
Selection List
Ch 0
Ch 1
Ch 2
Ch 3
Ch 4
Ch 5
Ch 6
Mode
Create New
Add Existing
Copy Existing
Select desired terminals from above to add to the channel list for your task. To select multiple items, hold down the <Shift> key. Click the arrow or press <Enter> when complete.
Timing Setup
Mode
Acquire 1 Sample
Acquire N Samples
Acquire Continuously
Timing
100 Samples
1000.00 Rate (Hz)
Block Setup
Advanced
Welcome to the
Task Configurator
Voltage
Welcome to the voltage measurement setup.
Steps:
1. Click Add New Measurements.
2. Select the desired terminals.
Note: Hold <Shift> to select multiple terminals.
3. Press <Enter> or click the check button.
4. Choose the desired settings for your measurements.
5. Save and exit or generate code.

Figure 12C

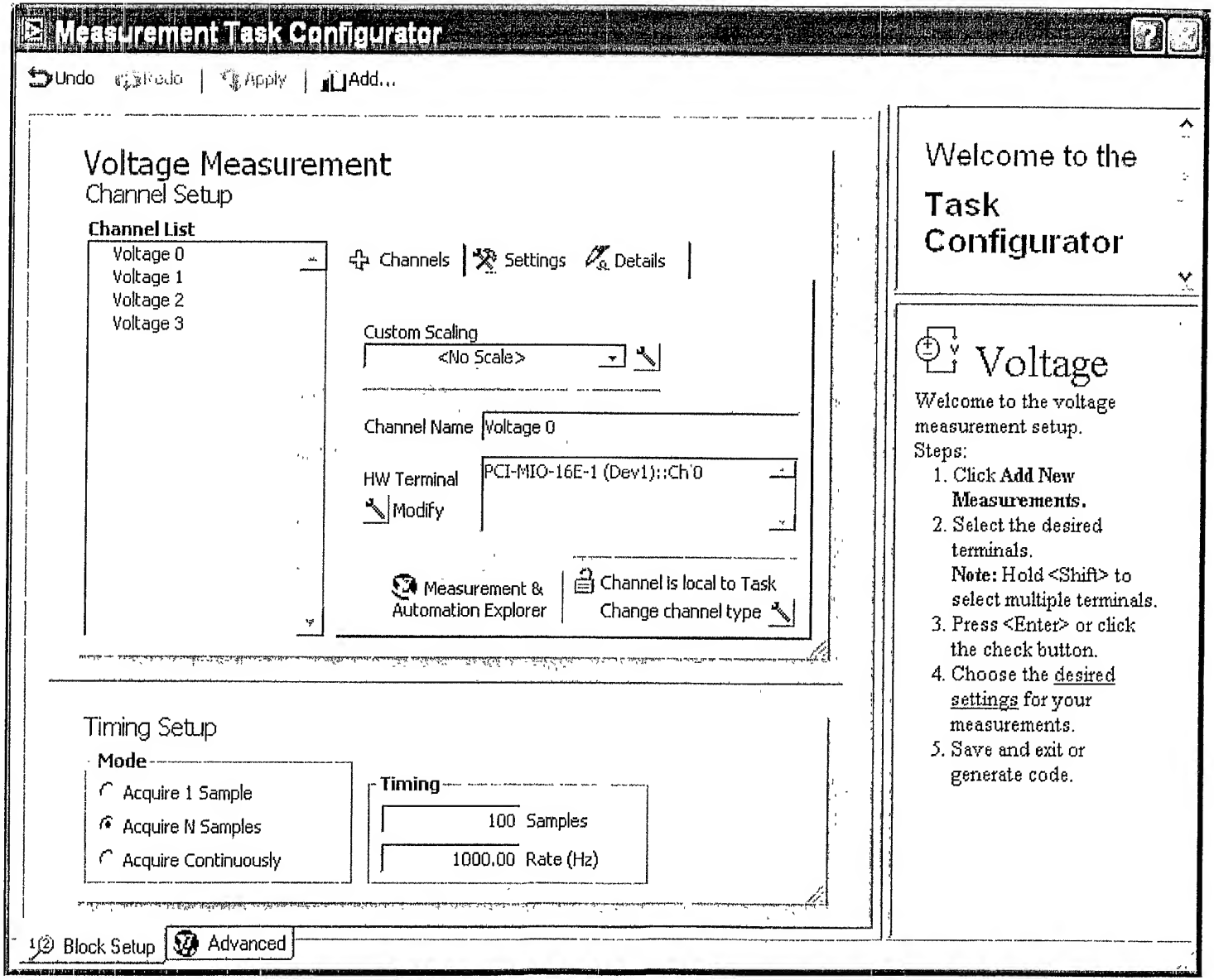

Measurement Task Configurator
Undo
Redo
Apply
Add...
Voltage Measurement
Channel Setup
Channel List
Voltage 0
Voltage 1
Voltage 2
Voltage 3
Channels
Settings
Details
Custom Scaling
<No Scale>
Channel Name
Voltage 0
HW Terminal
PCI-MIO-16E-1 (Dev1)::Ch 0
Modify
Measurement & Automation Explorer
Channel is local to Task
Change channel type
Timing Setup
Mode
Acquire 1 Sample
Acquire N Samples
Acquire Continuously
Timing
100 Samples
1000.00 Rate (Hz)
Block Setup
Advanced
Welcome to the
Task Configurator
Voltage
Welcome to the voltage measurement setup.
Steps:
1. Click Add New Measurements.
2. Select the desired terminals.
Note: Hold <Shift> to select multiple terminals.
3. Press <Enter> or click the check button.
4. Choose the desired settings for your measurements.
5. Save and exit or generate code.

Figure 12D

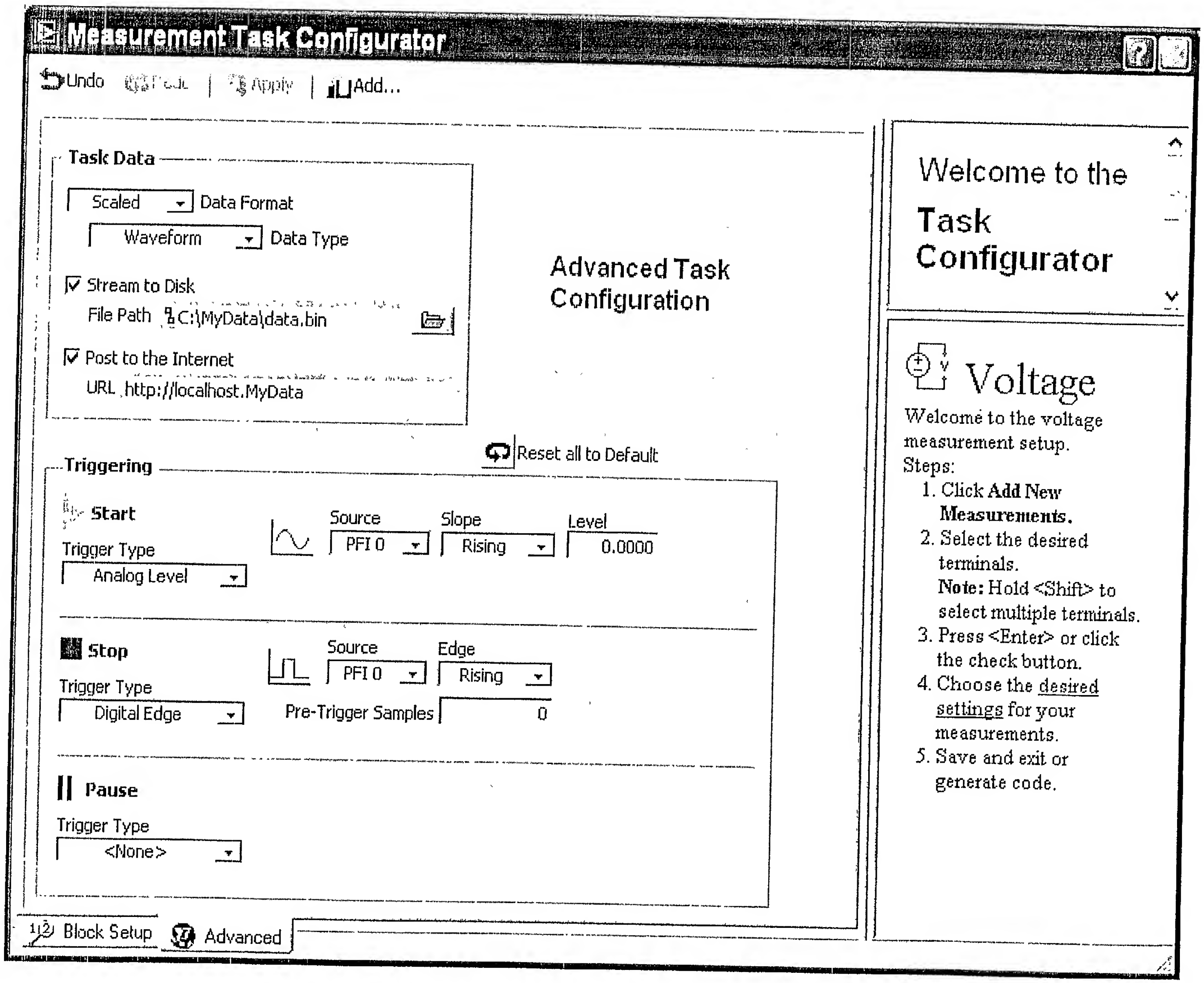

Measurement Task Configurator
Undo
Apply
Add...
Task Data
Scaled
Data Format
Waveform
Data Type
Stream to Disk
File Path C:\MyData\data.bin
Post to the Internet
URL http://localhost.MyData
Advanced Task Configuration
Reset all to Default
Triggering
Start
Trigger Type
Analog Level
Source
PFI 0
Slope
Rising
Level
0.0000
Stop
Trigger Type
Digital Edge
Source
PFI 0
Edge
Rising
Pre-Trigger Samples
0
Pause
Trigger Type
<None>
Block Setup
Advanced
Welcome to the Task Configurator
Voltage
Welcome to the voltage measurement setup.
Steps:
1. Click Add New Measurements.
2. Select the desired terminals.
Note: Hold <Shift> to select multiple terminals.
3. Press <Enter> or click the check button.
4. Choose the desired settings for your measurements.
5. Save and exit or generate code.

Figure 13

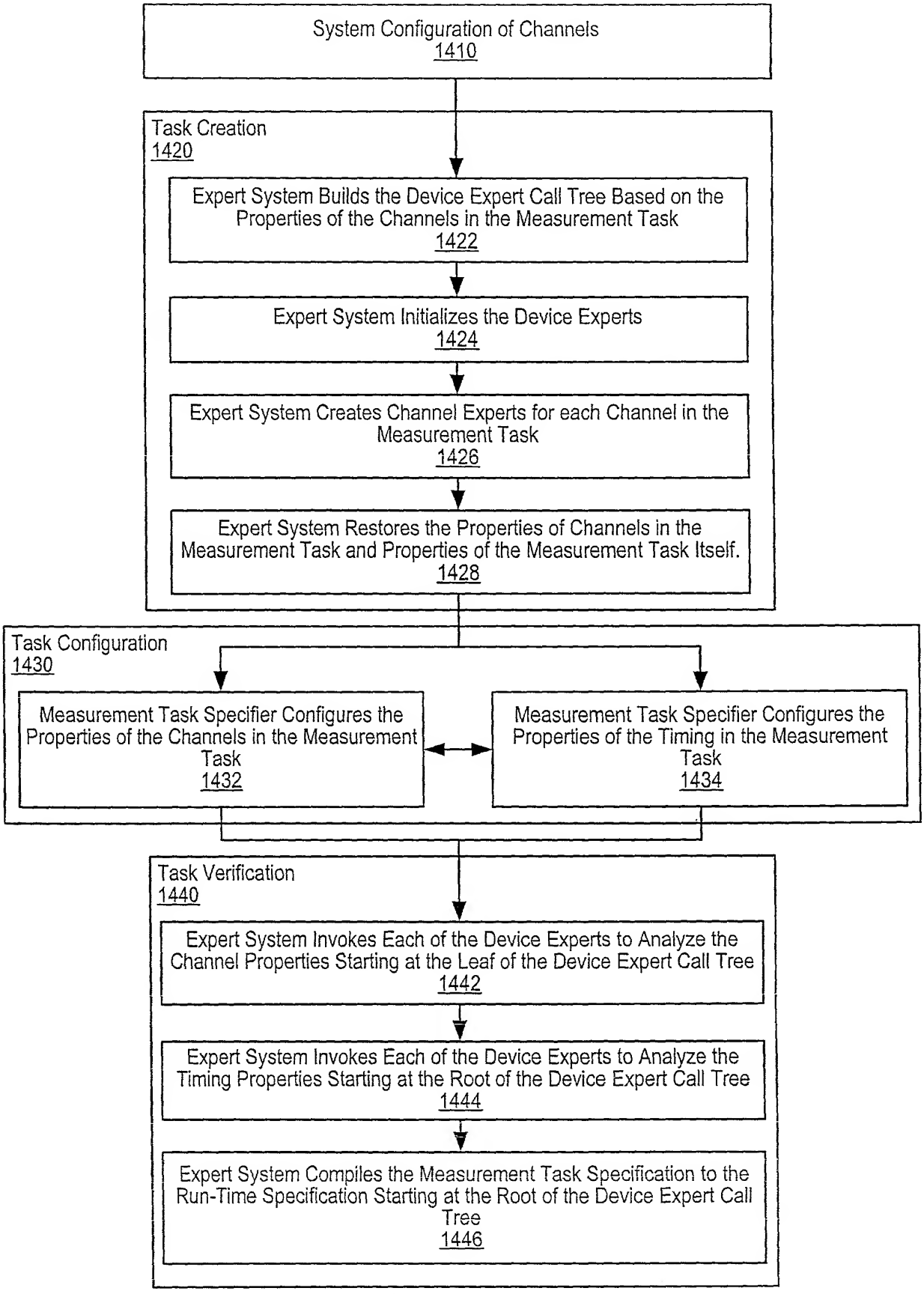


Figure 14

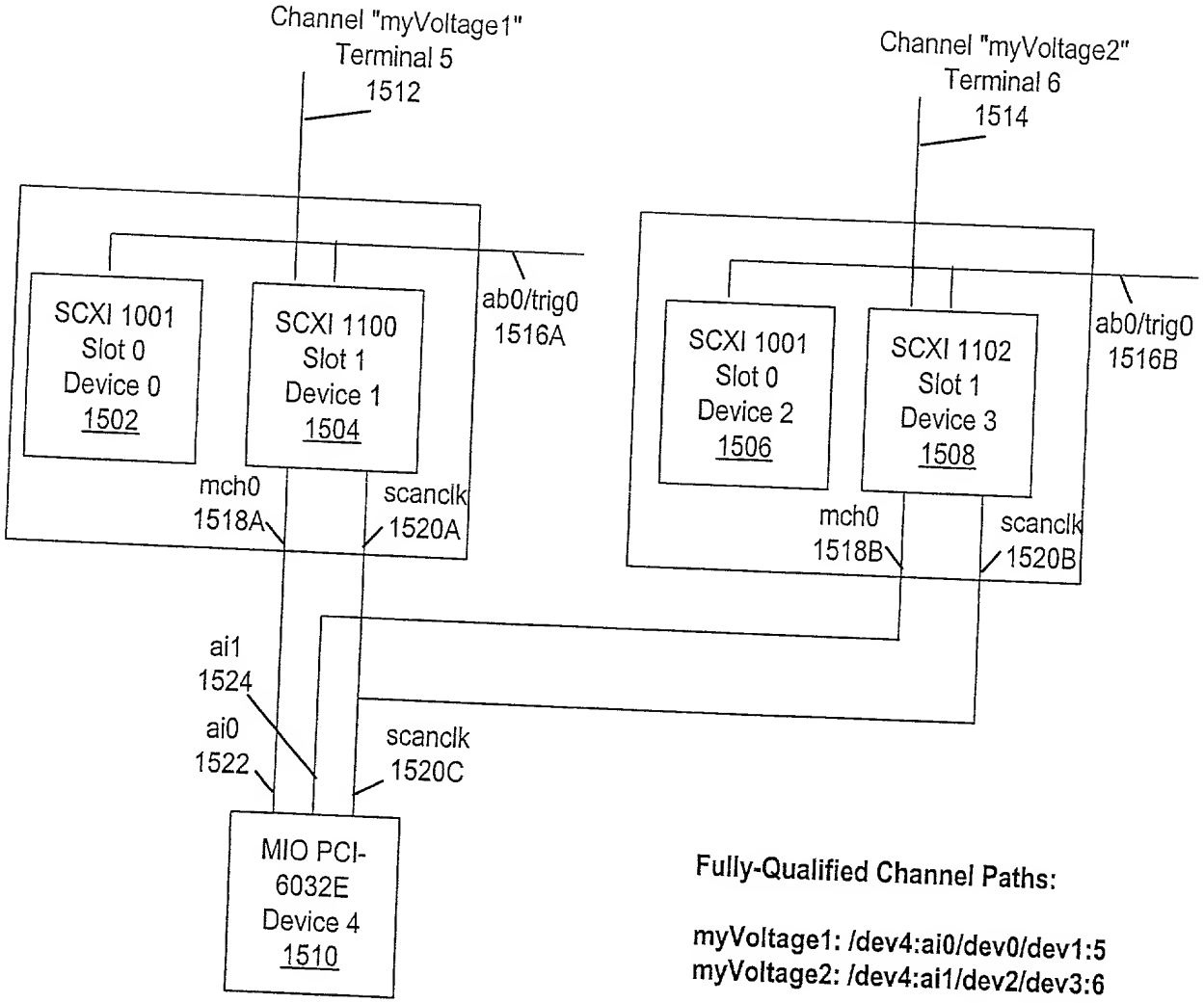
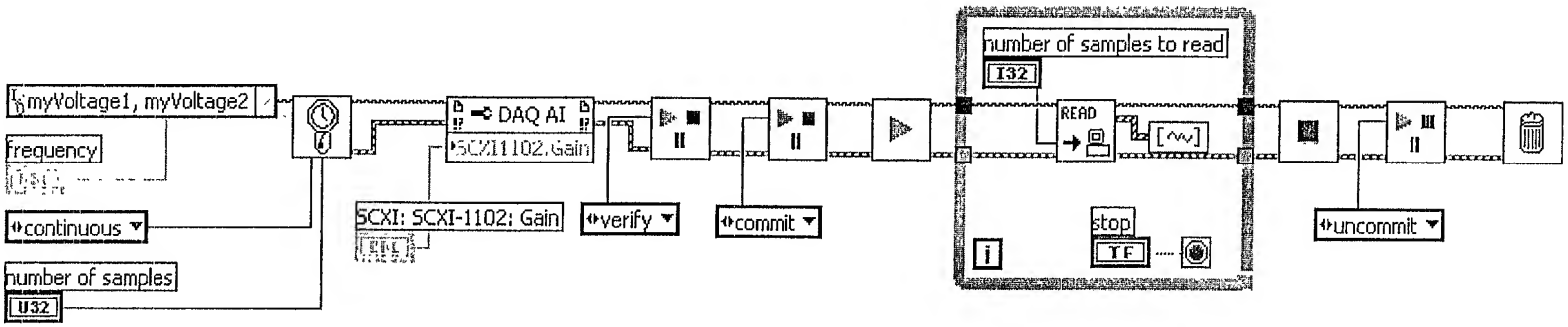
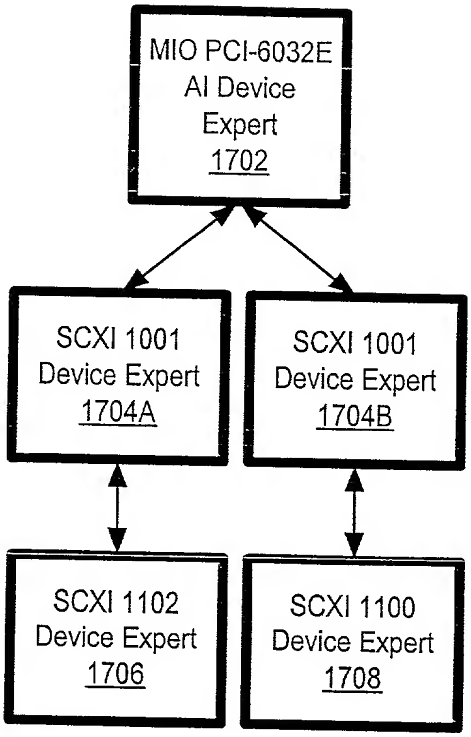

Channel "myVoltage1"
Terminal 5
1512
Channel "myVoltage2"
Terminal 6
1514
SCXI 1001
Slot 0
Device 0
1502
SCXI 1100
Slot 1
Device 1
1504
ab0/trig0
1516A
SCXI 1001
Slot 0
Device 2
1506
SCXI 1102
Slot 1
Device 3
1508
ab0/trig0
1516B
mch0
1518A
scanclk
1520A
mch0
1518B
scanclk
1520B
ai1
1524
ai0
1522
scanclk
1520C
MIO PCI-
6032E
Device 4
1510
Fully-Qualified Channel Paths:
myVoltage1: /dev4:ai0/dev0/dev1:5
myVoltage2: /dev4:ai1/dev2/dev3:6

Figure 15



Voltage On Two Channels with Two SCXI Modules in Two SCXI Chassis Connected to an MIO DAQ Device

Figure 16



Create Device Expert Call Tree

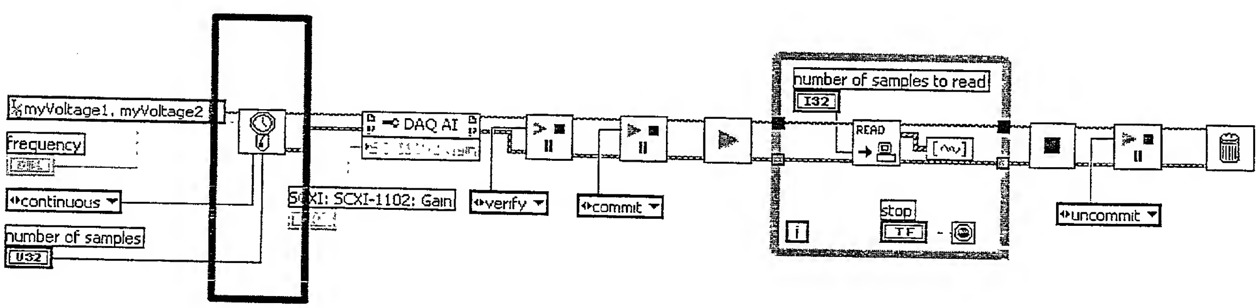
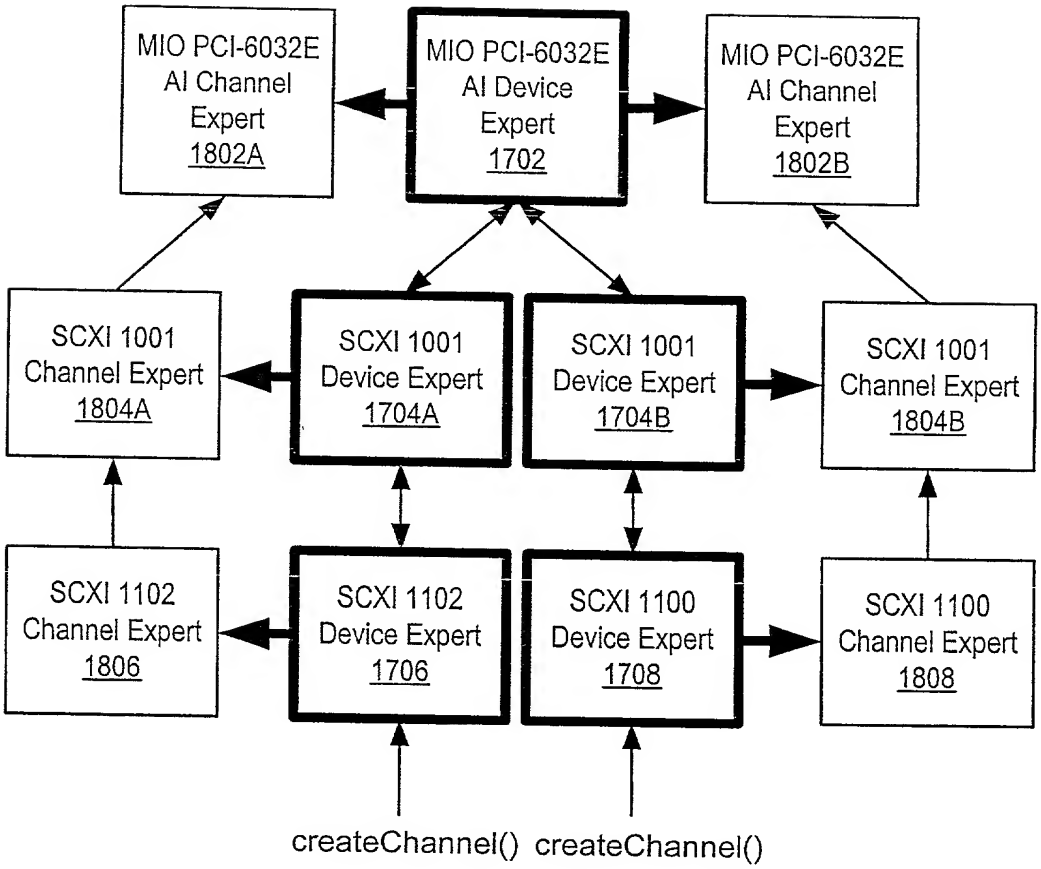


Figure 17



Create Channel Experts

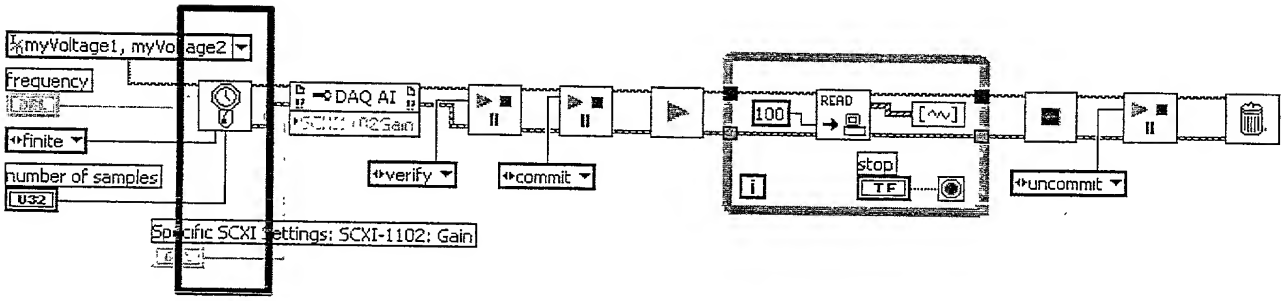
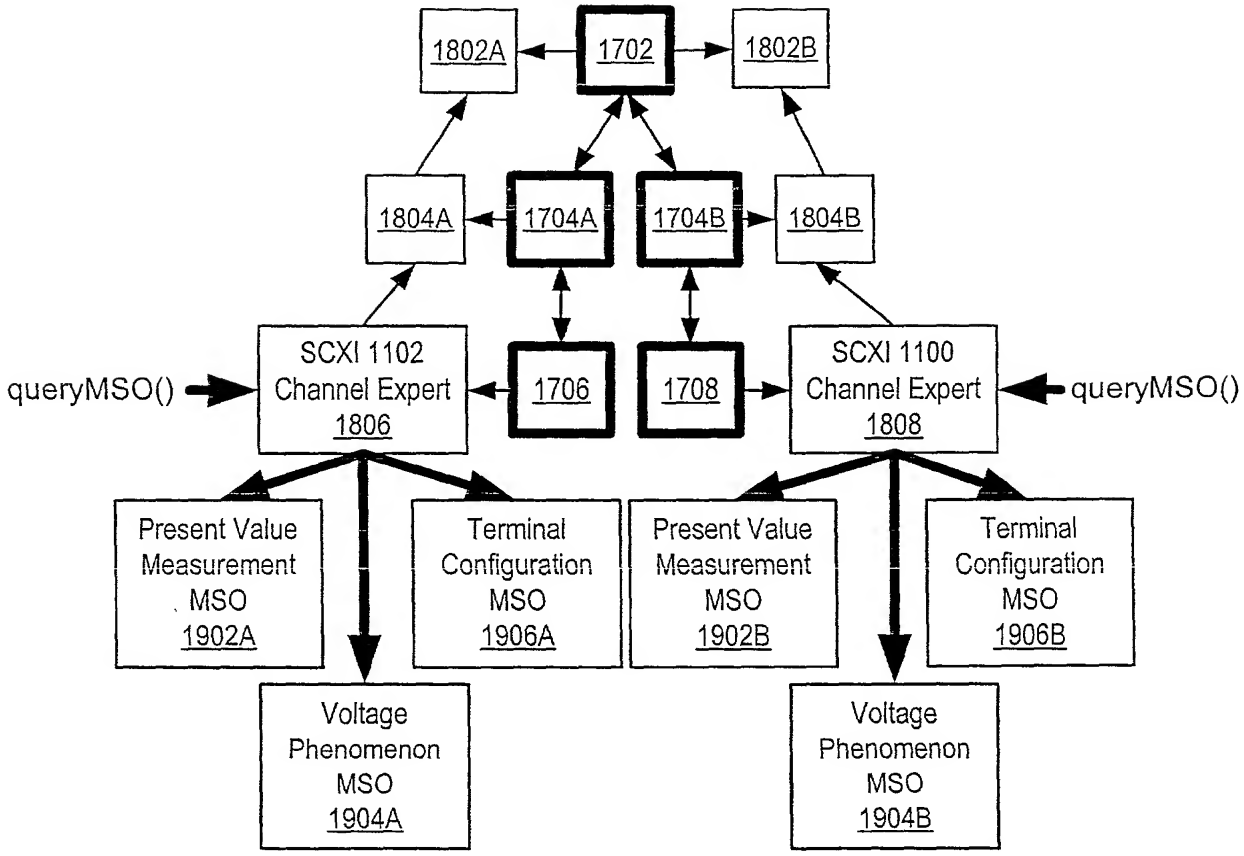


Figure 18



Deserialize Named Channel MSOs

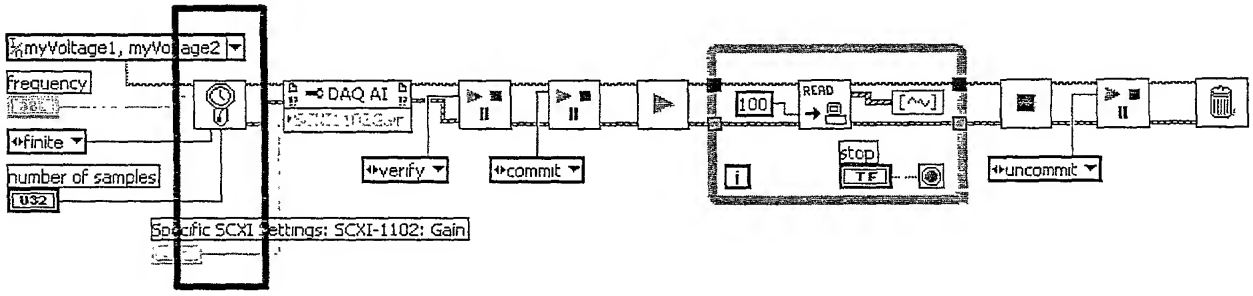
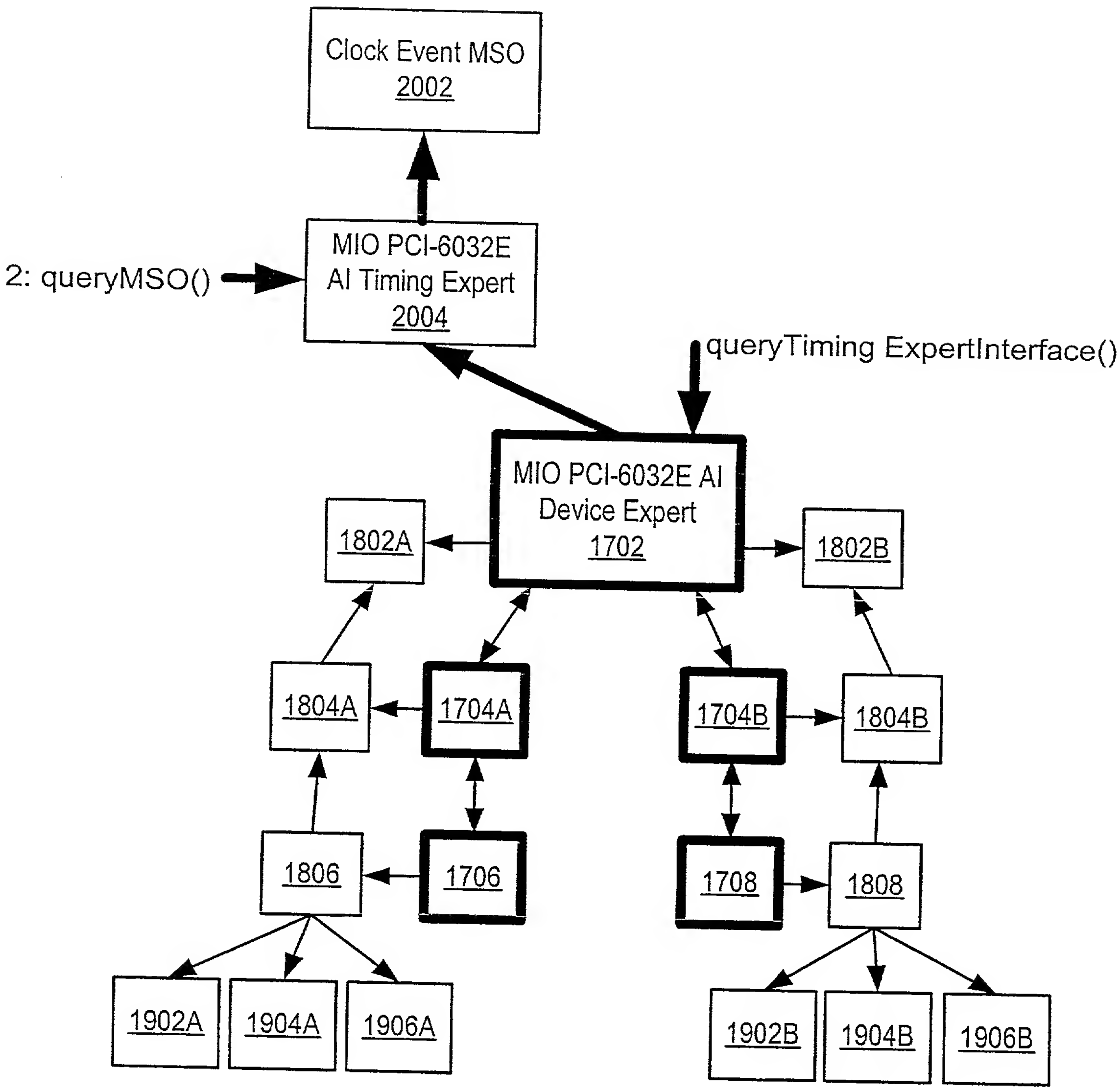


Figure 19



Configure Timing Experts

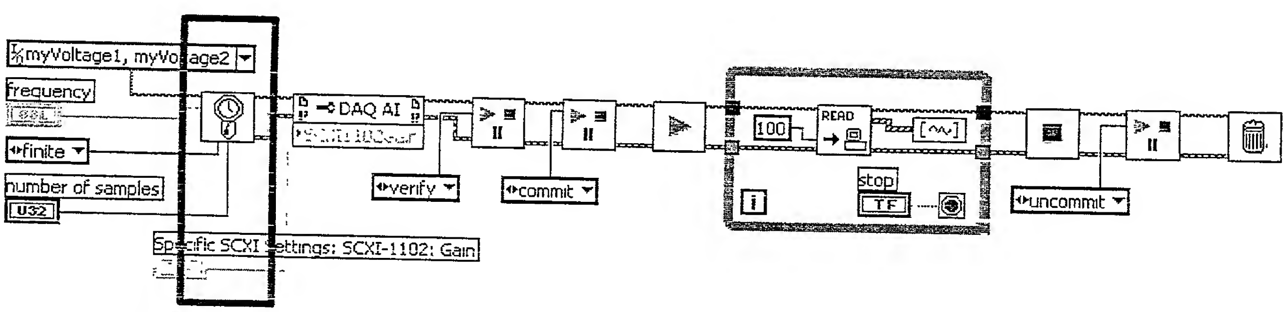
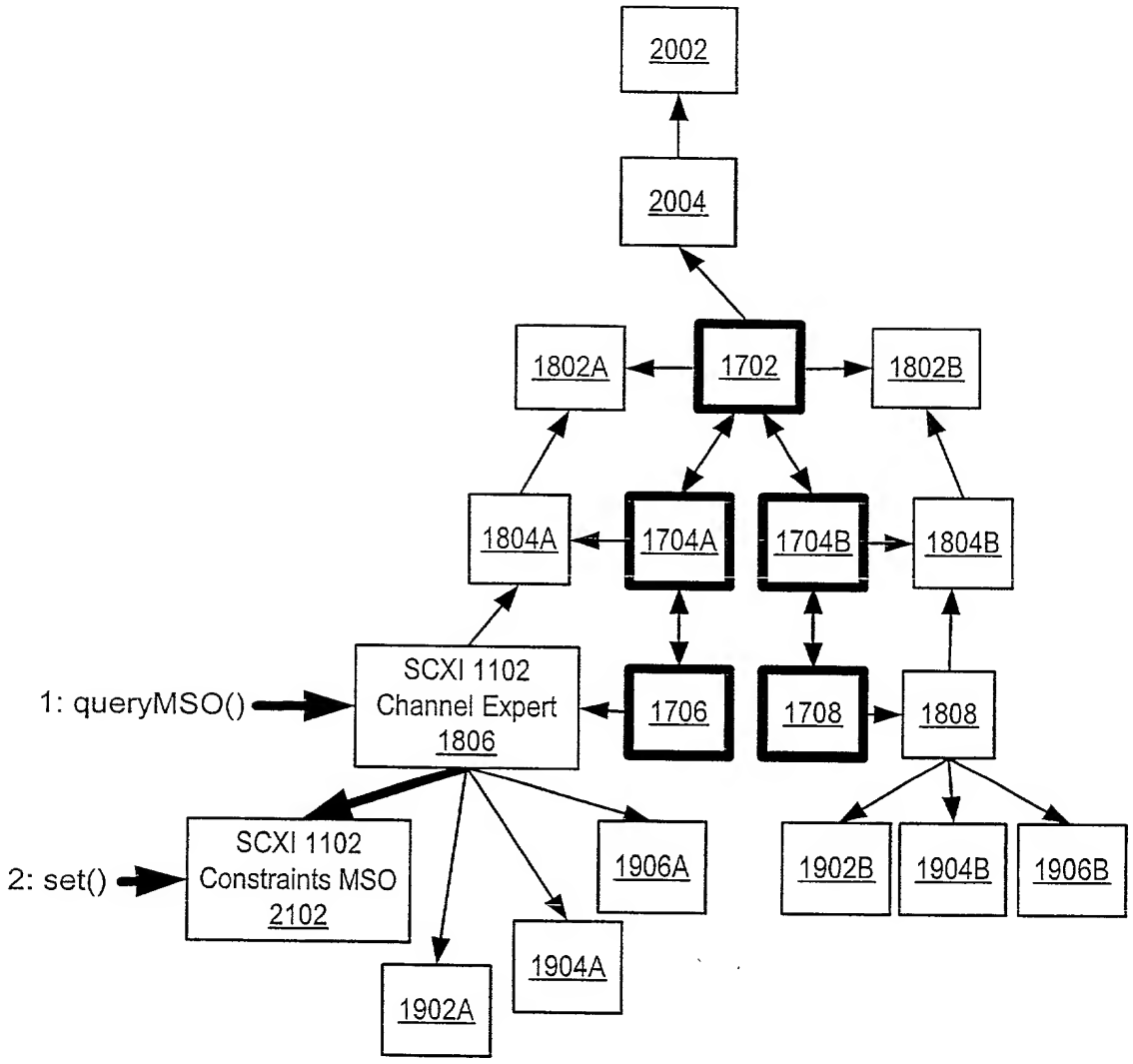


Figure 20



MSO Set Calls

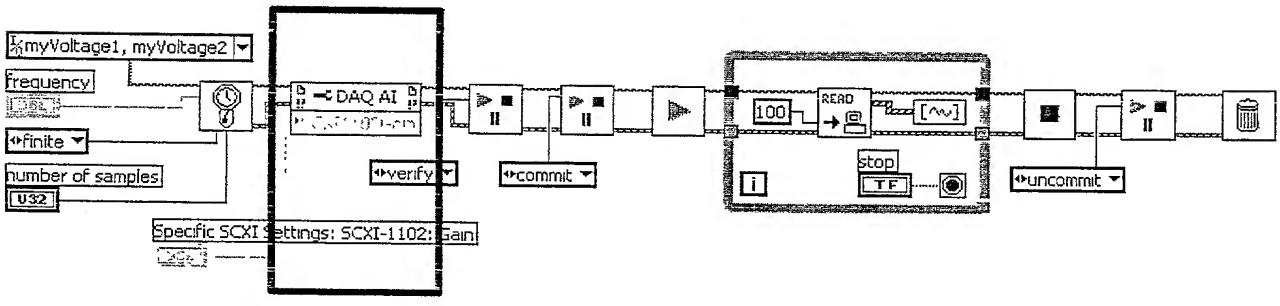
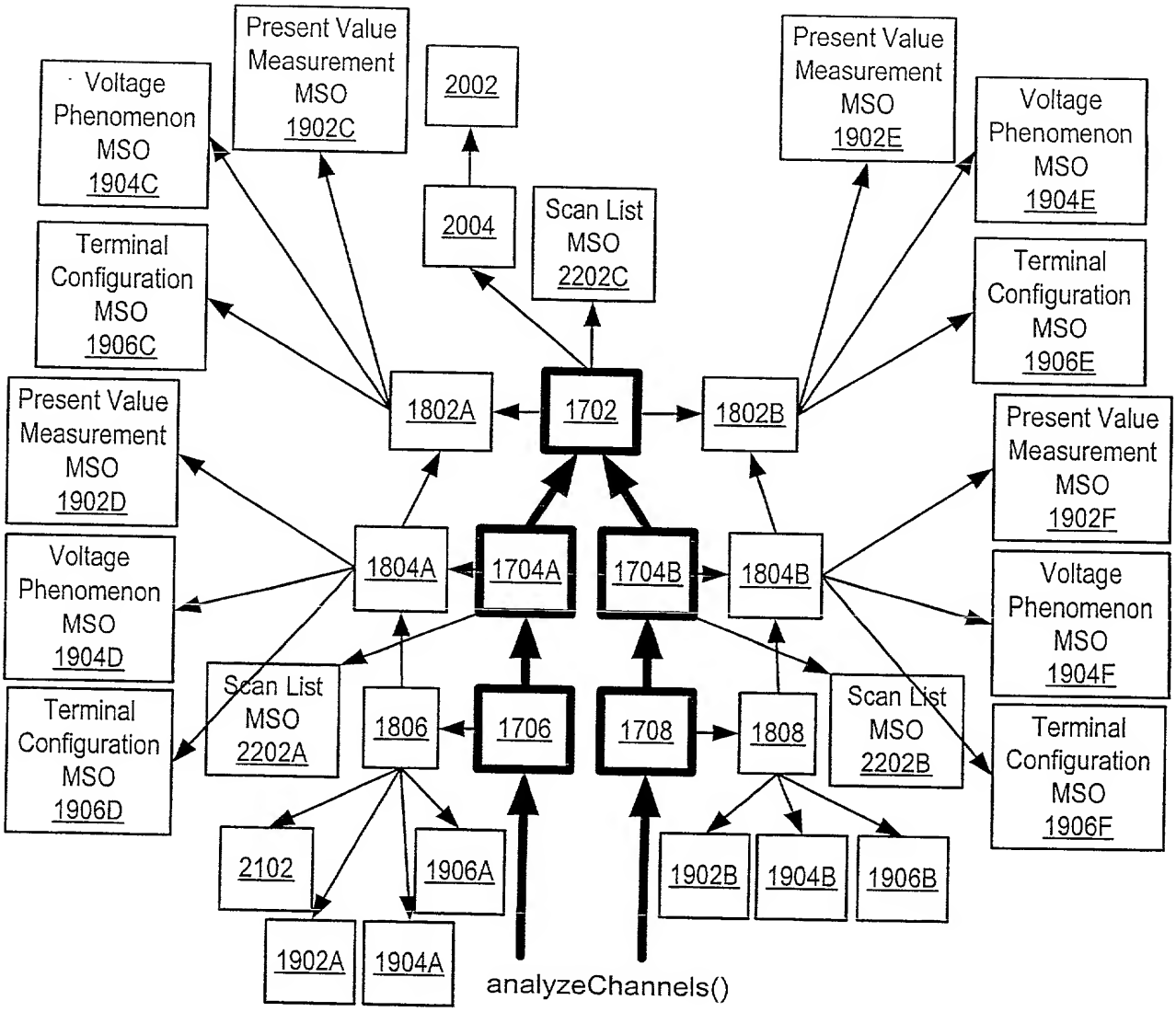


Figure 21



Analyze Channels

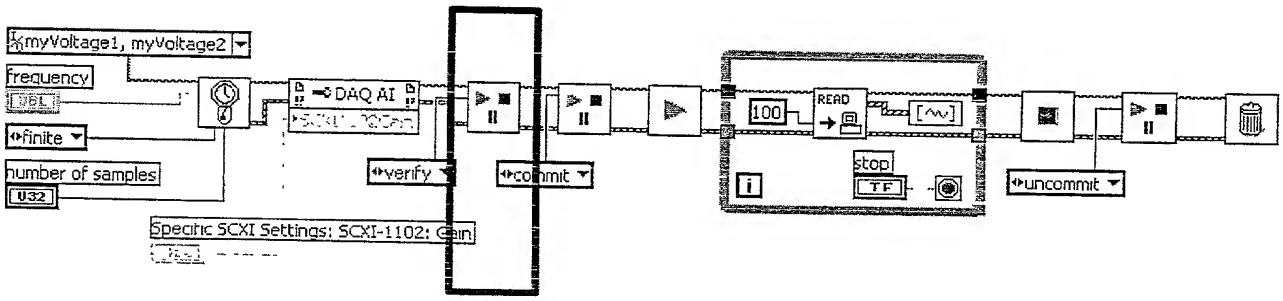
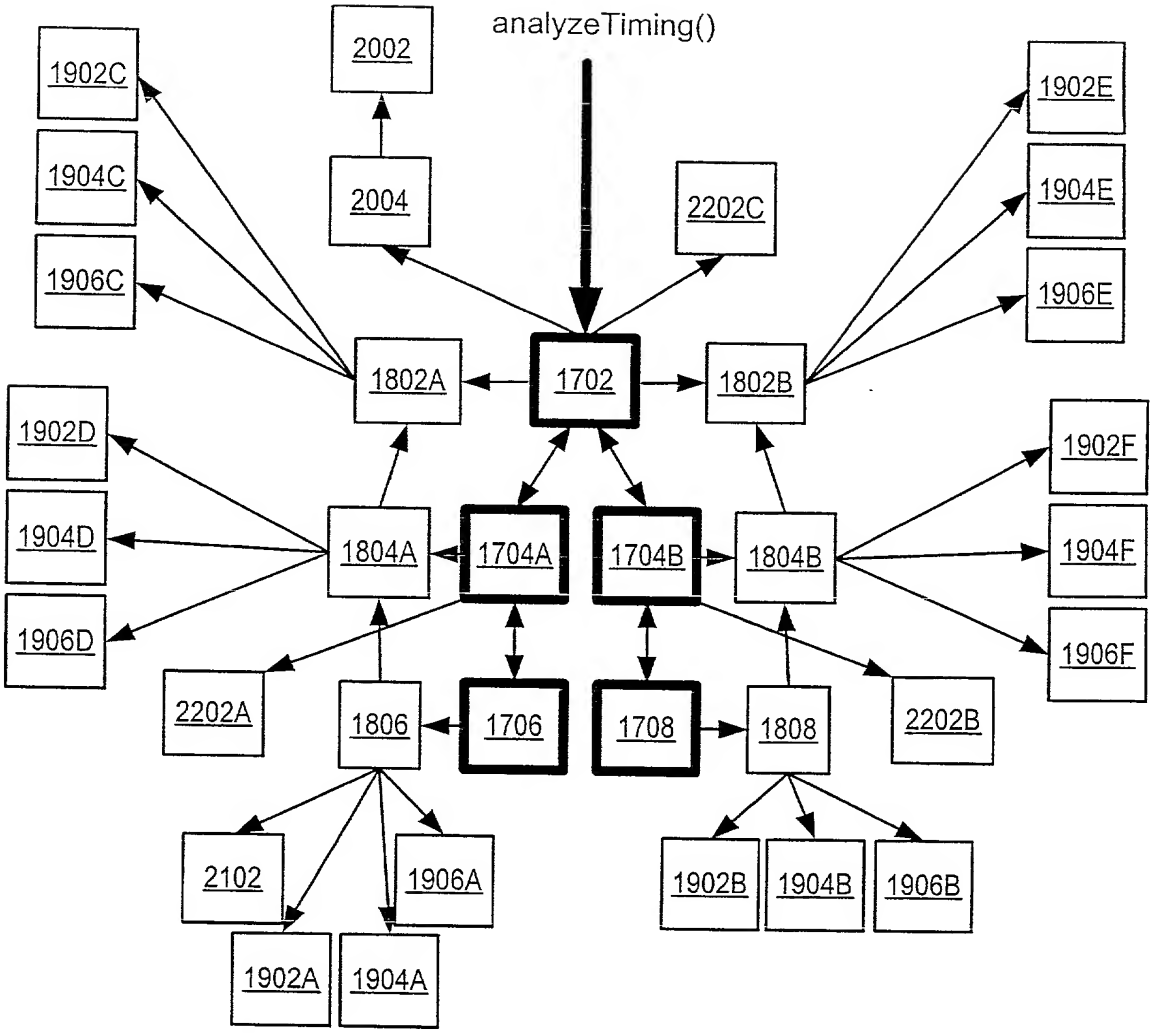


Figure 22



Analyze Timing

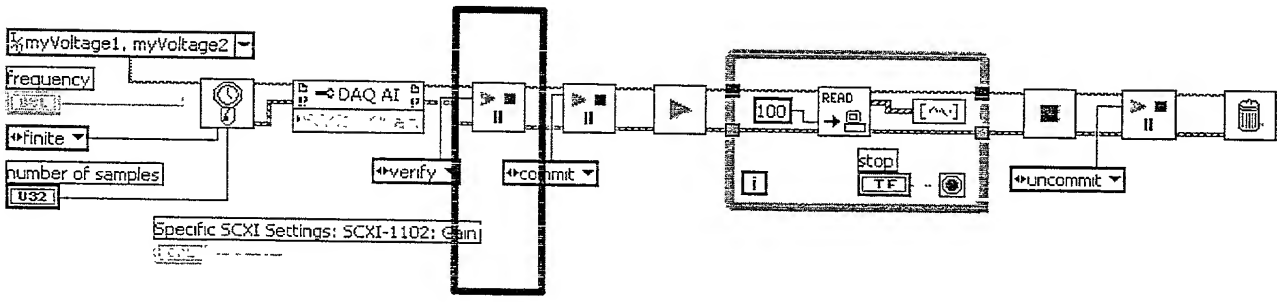
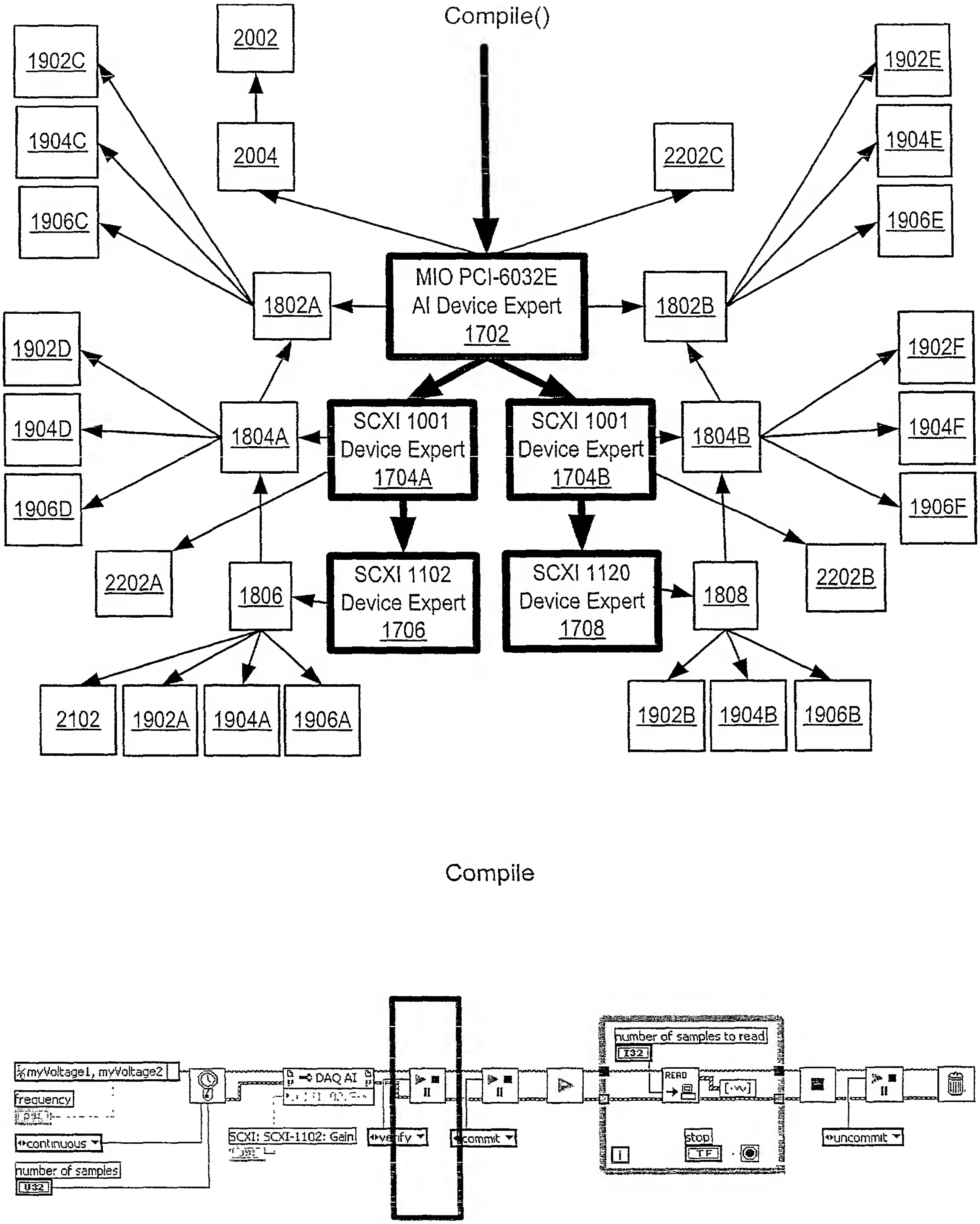
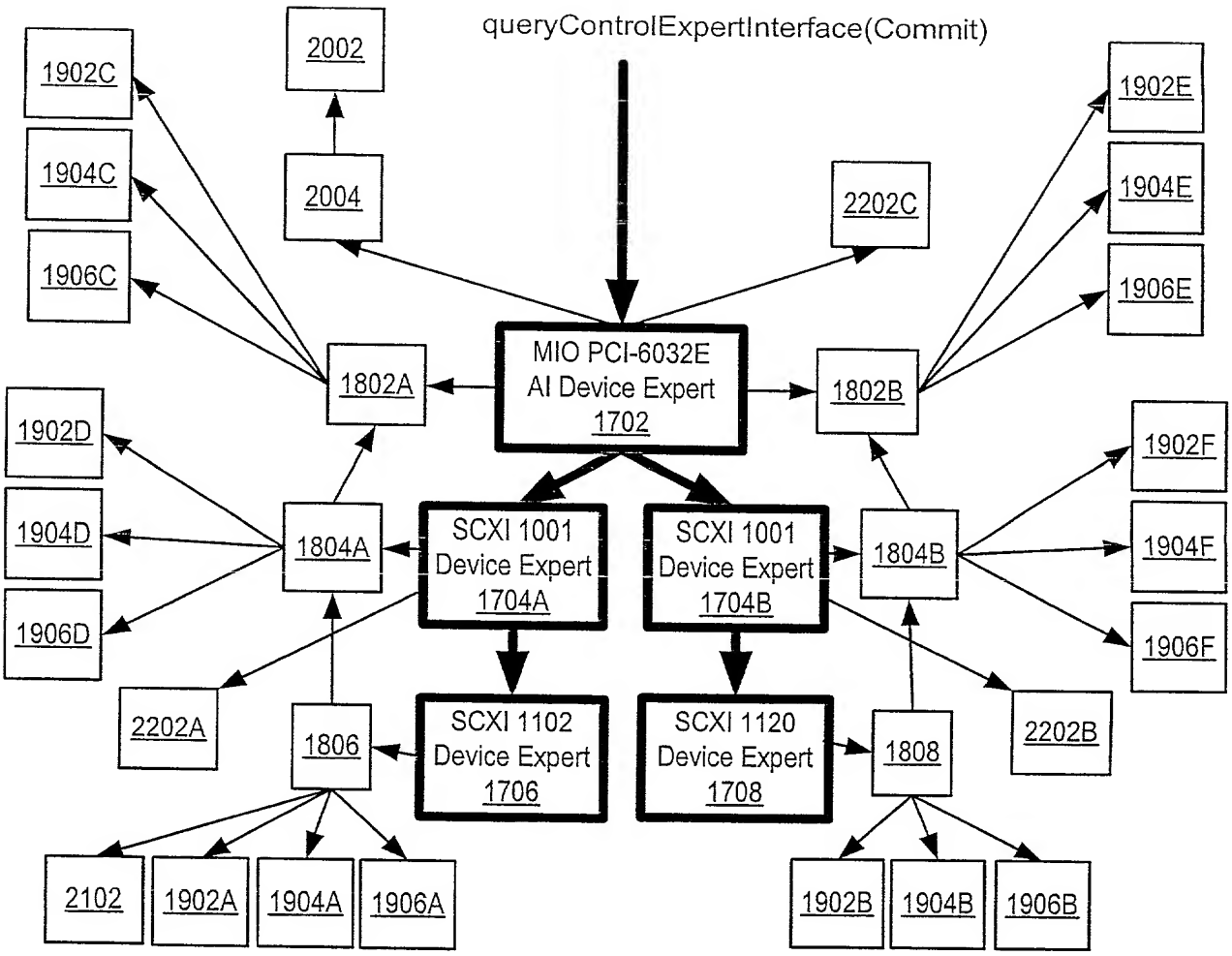


Figure 23



Compile()
2002
2004
2202C
1902C
1904C
1906C
1902E
1904E
1906E
MIO PCI-6032E
AI Device Expert
1702
1802A
1802B
1902D
1904D
1906D
1902F
1904F
1906F
1804A
1804B
SCXI 1001
Device Expert
1704A
SCXI 1001
Device Expert
1704B
2202A
2202B
1806
1808
SCXI 1102
Device Expert
1706
SCXI 1120
Device Expert
1708
2102
1902A
1904A
1906A
1902B
1904B
1906B
Compile
myVoltage1, myVoltage2
frequency
continuous
number of samples
U32
DAQ AI
SCXI: SCXI-1102: Gain
verify
commit
number of samples to read
I32
READ
stop
TF
uncommit

Figure 24A



Commit

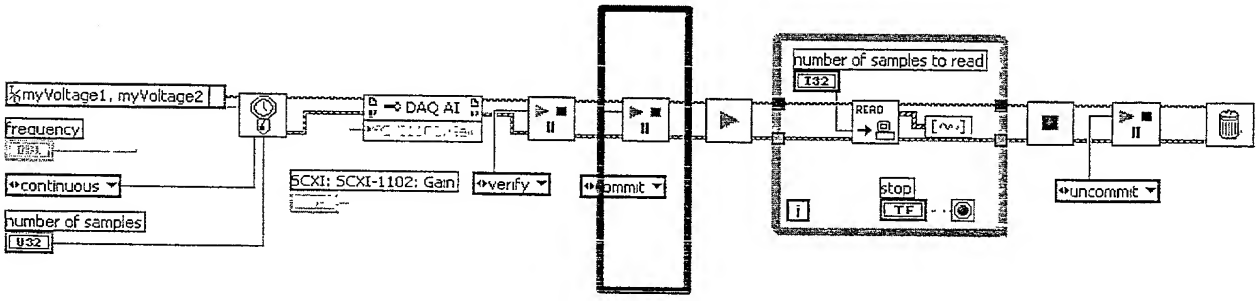
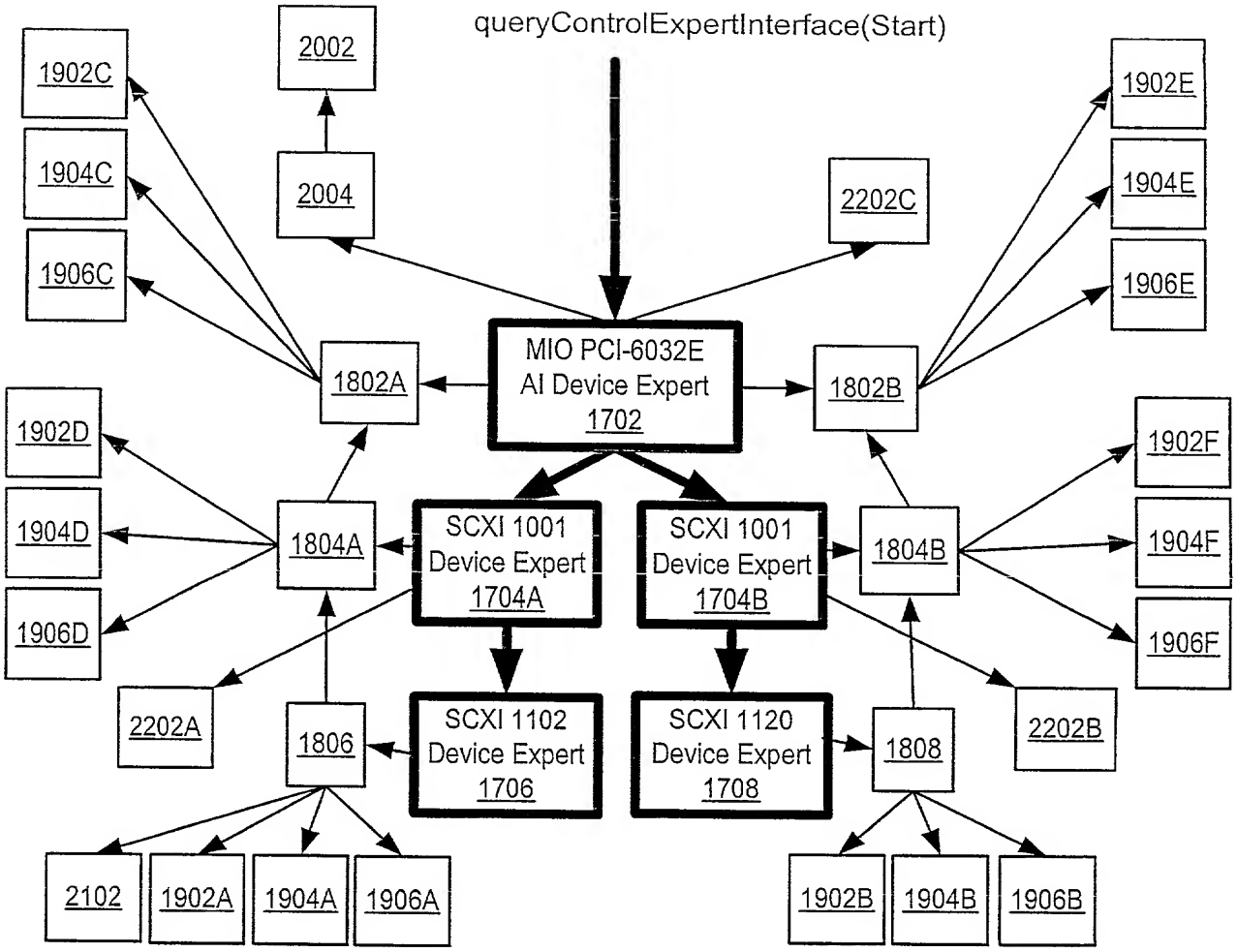


Figure 24B



Start

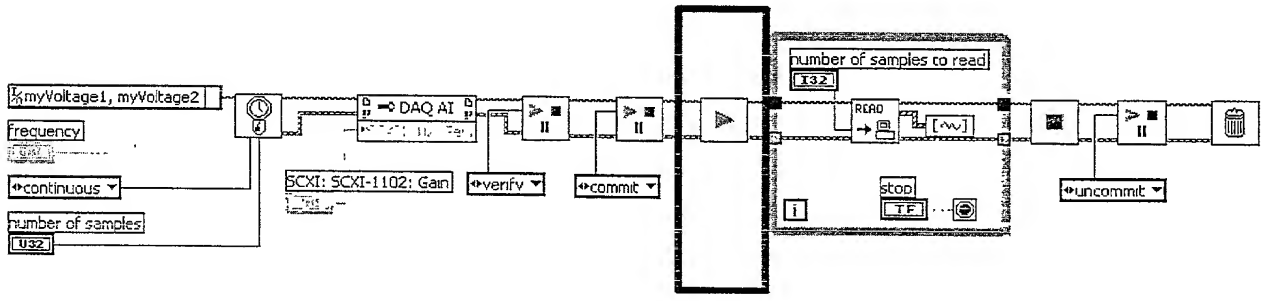
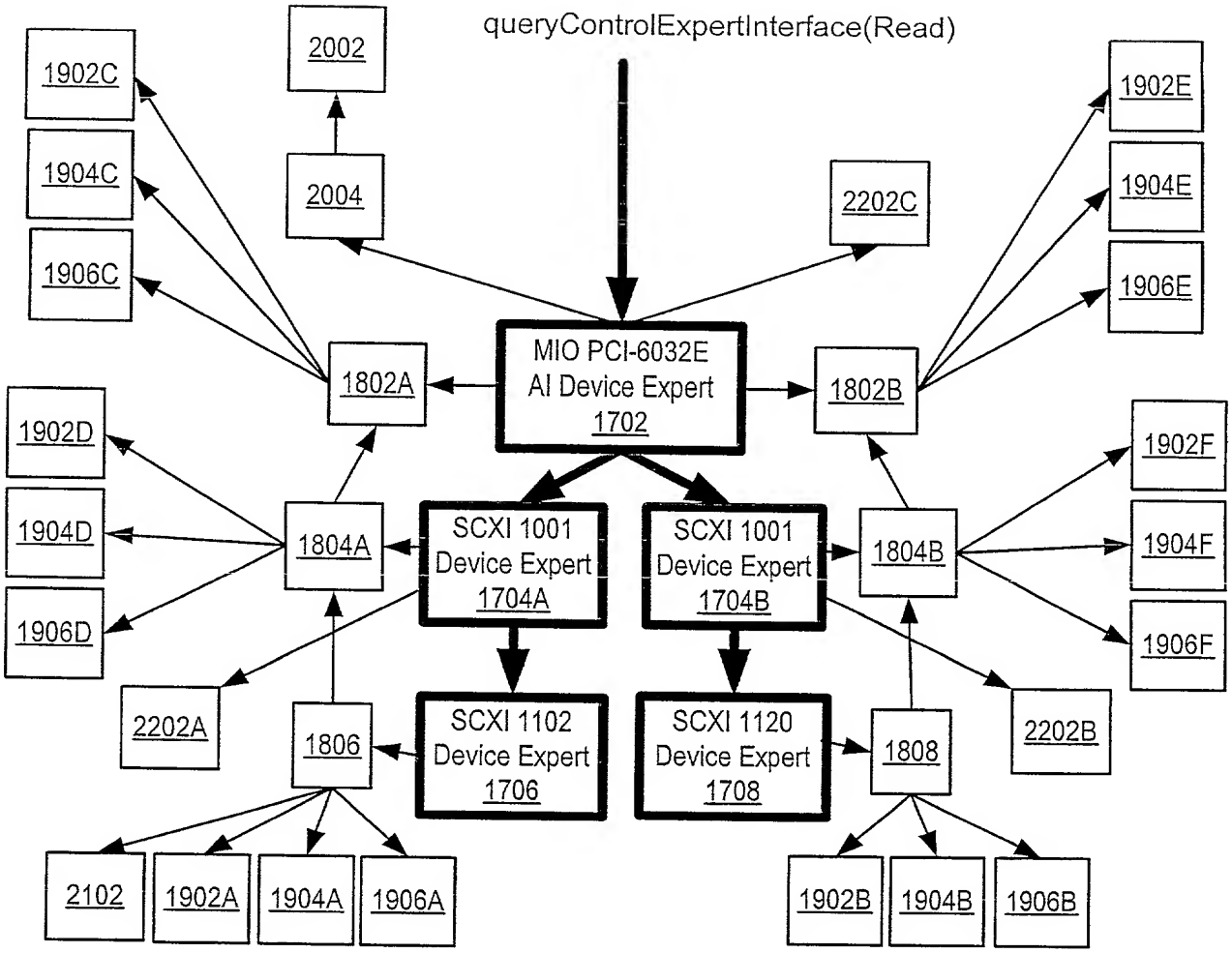


Figure 24C



Read

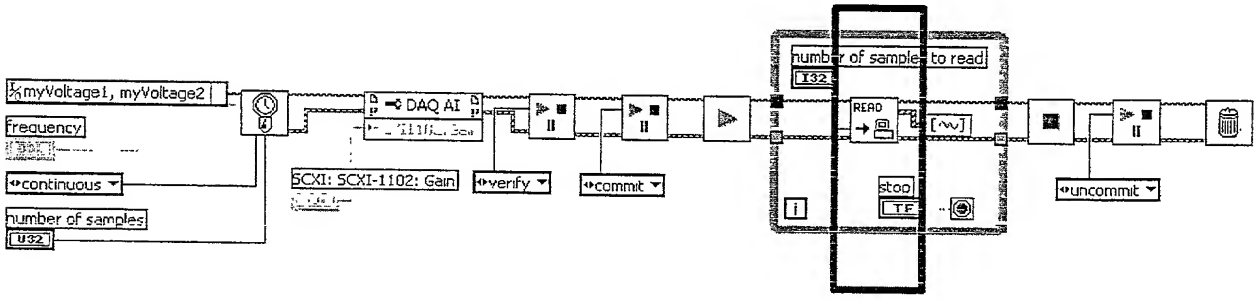
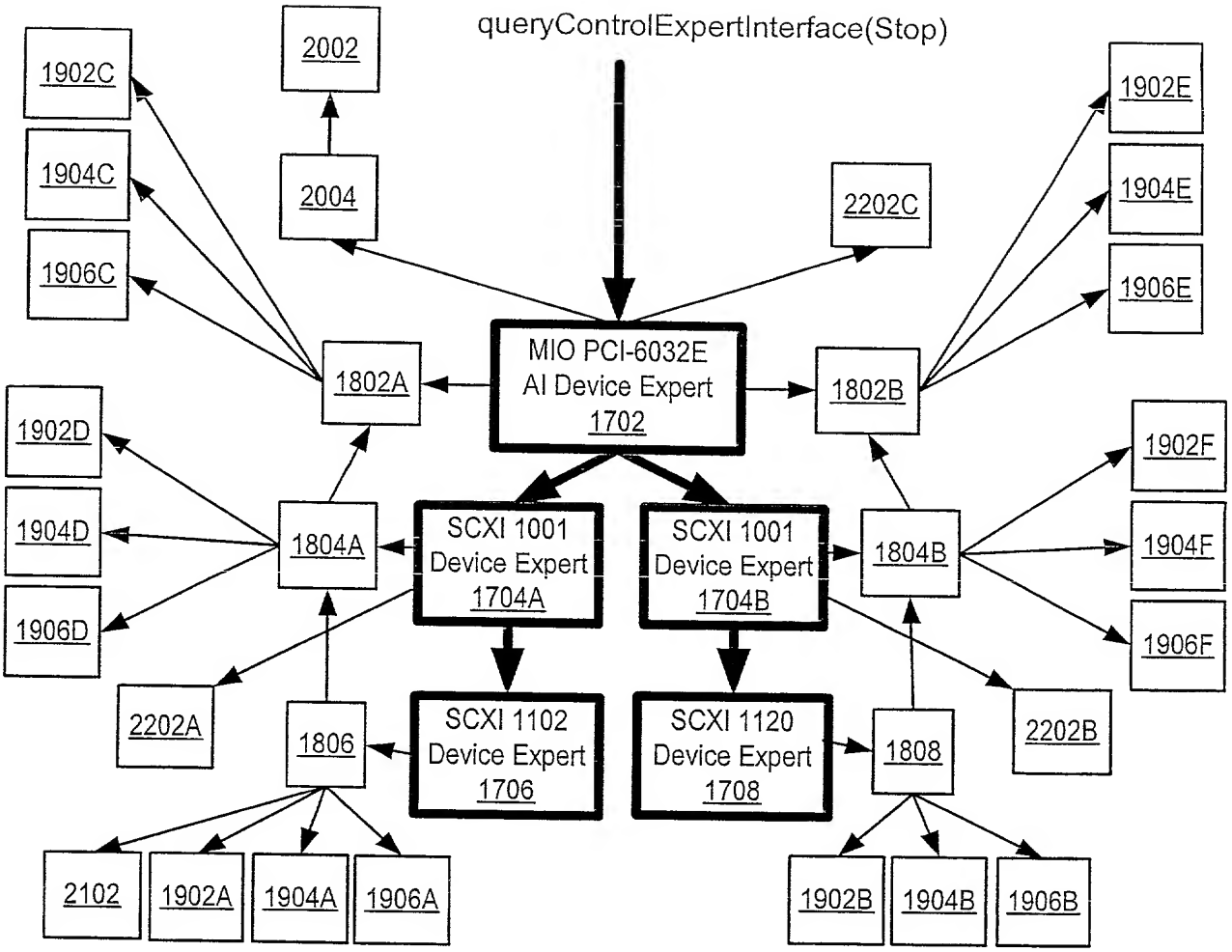


Figure 24D



Stop

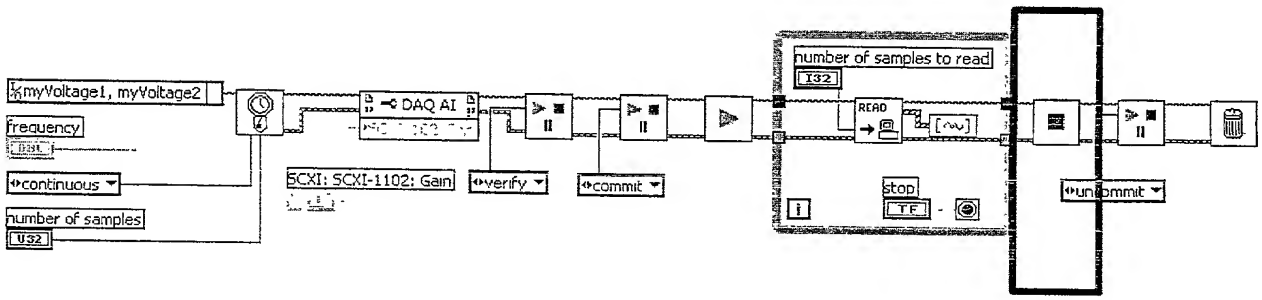
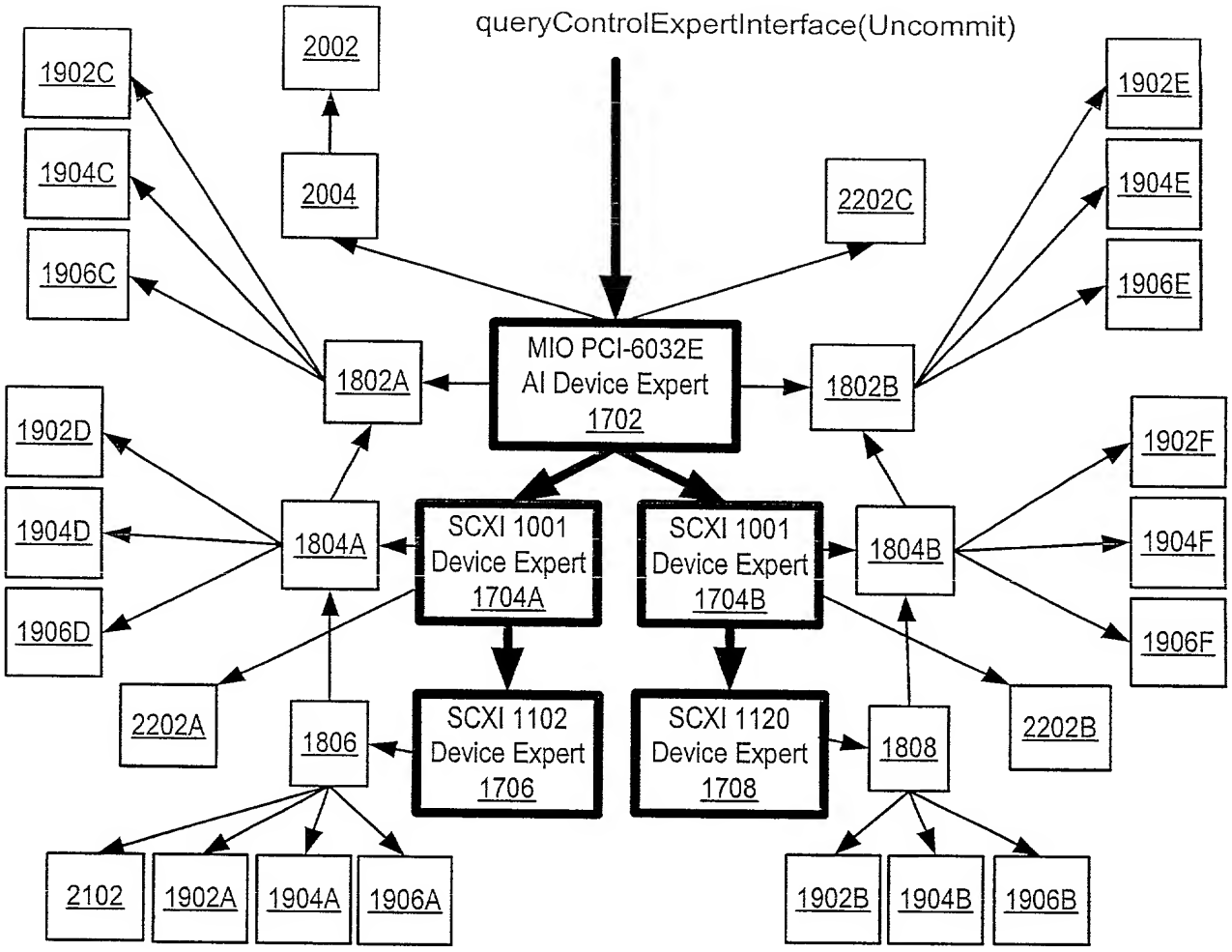


Figure 24E



Uncommit

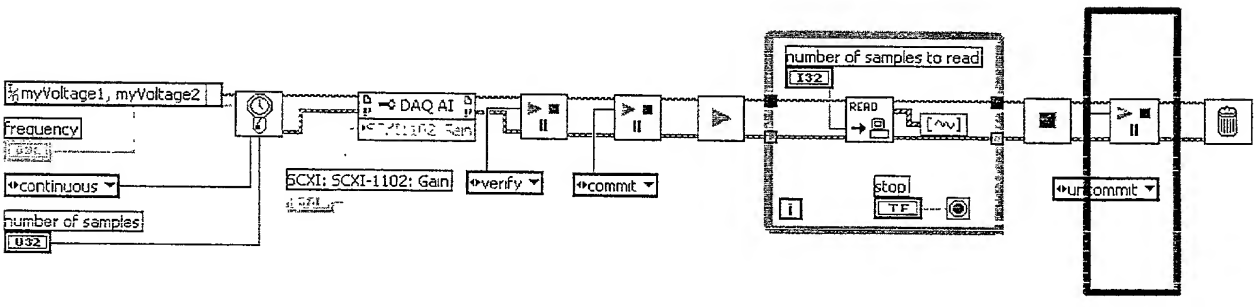
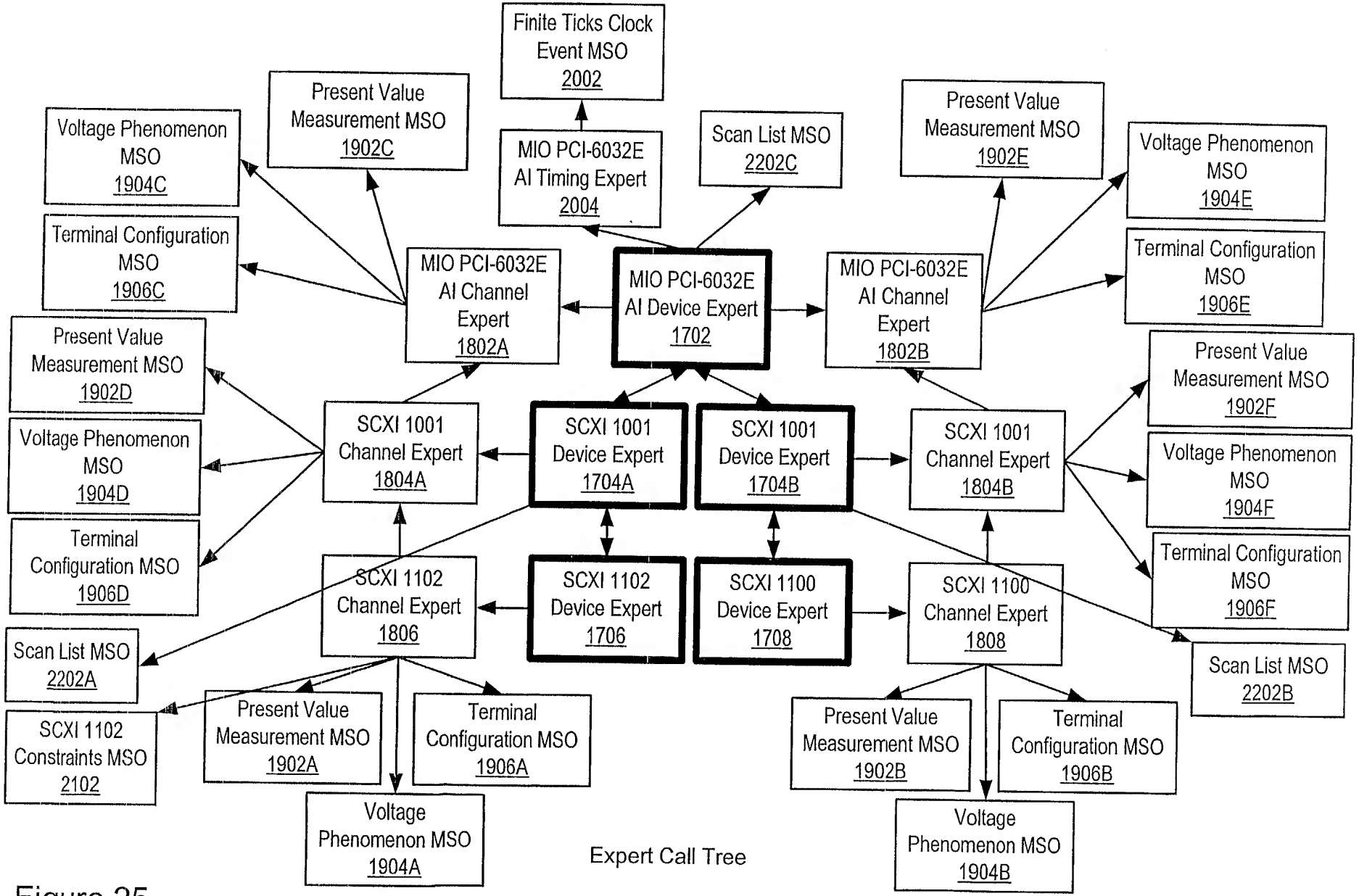


Figure 24F



Expert Call Tree

Figure 25

Use Case: Multi-Chassis SCXI Finite Acquisition Using An MIO

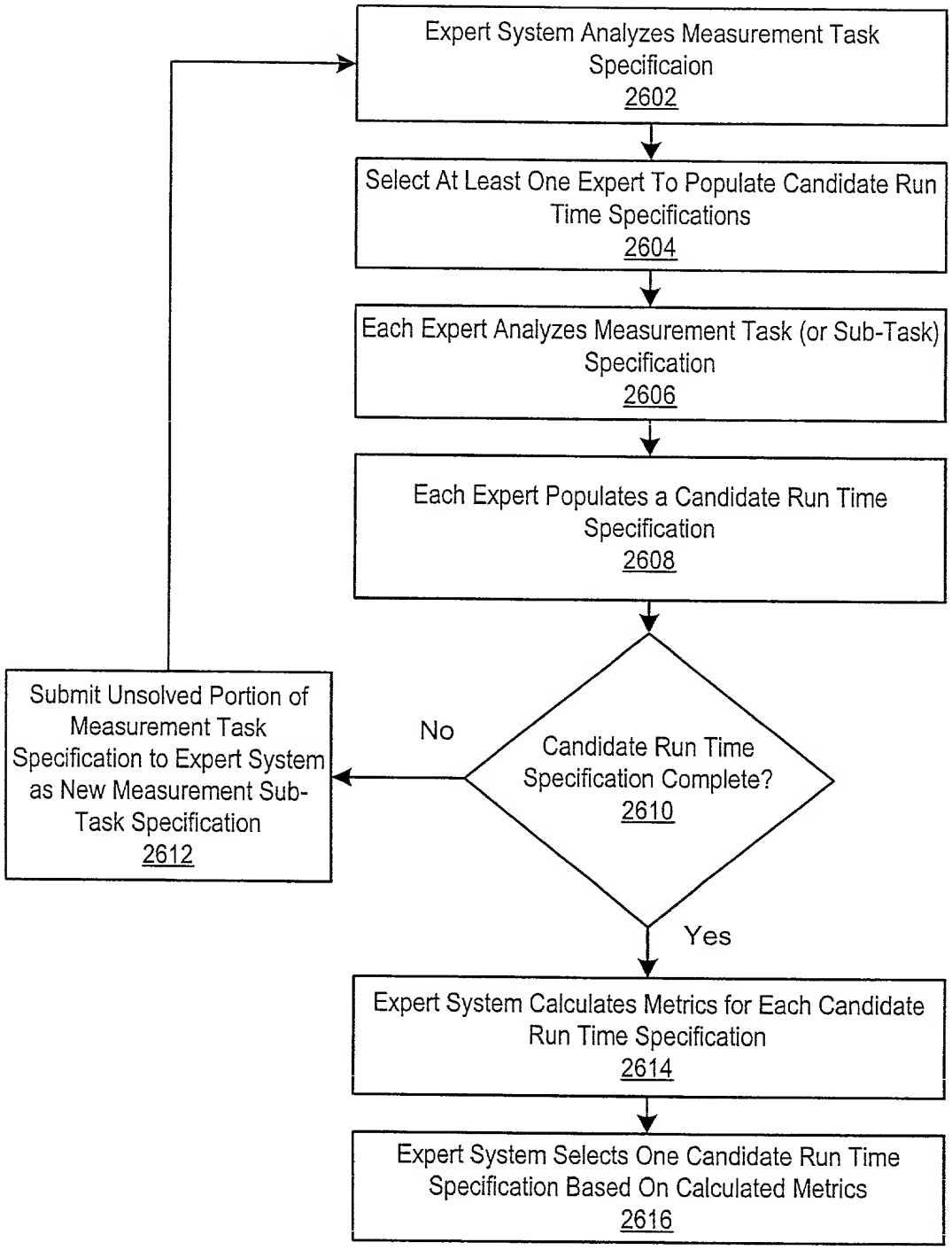


Figure 26

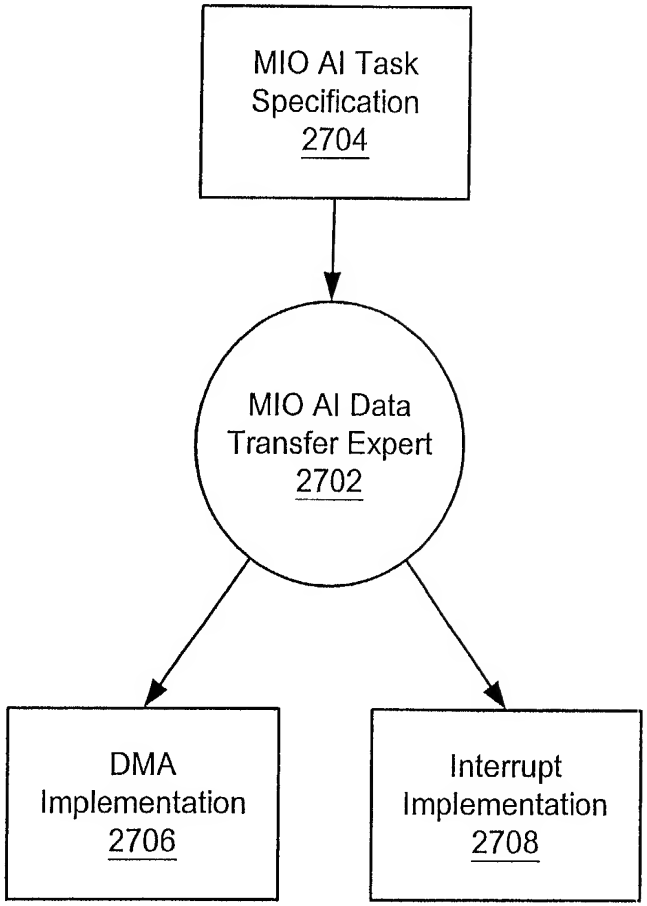

MIO AI Task Specification 2704
MIO AI Data Transfer Expert 2702
DMA Implementation 2706
Interrupt Implementation 2708

Figure 27

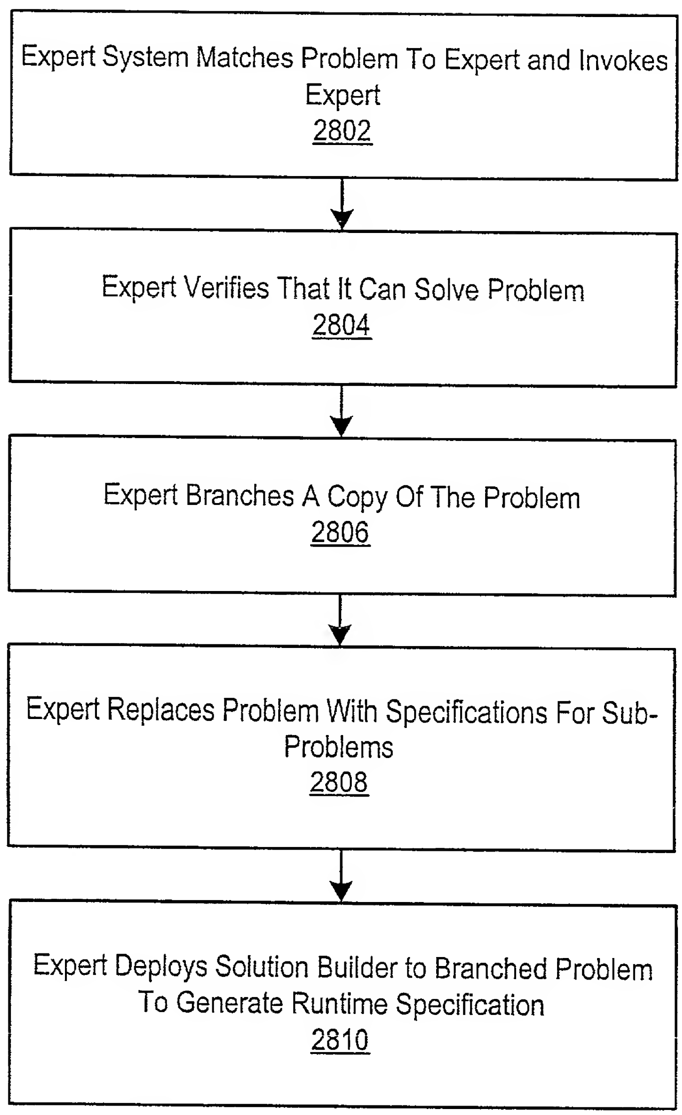

Expert System Matches Problem To Expert and Invokes Expert
2802
Expert Verifies That It Can Solve Problem
2804
Expert Branches A Copy Of The Problem
2806
Expert Replaces Problem With Specifications For Sub-Problems
2808
Expert Deploys Solution Builder to Branched Problem To Generate Runtime Specification
2810

Figure 28

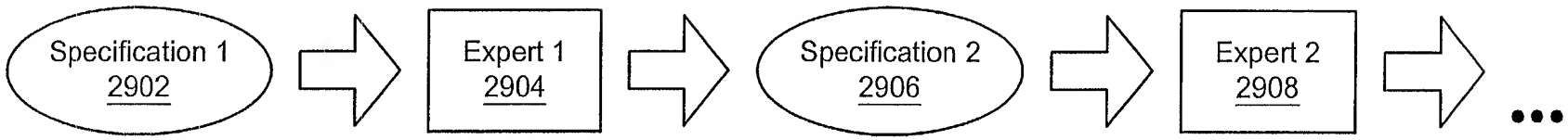

Specification 1
2902
Expert 1
2904
Specification 2
2906
Expert 2
2908

Figure 29

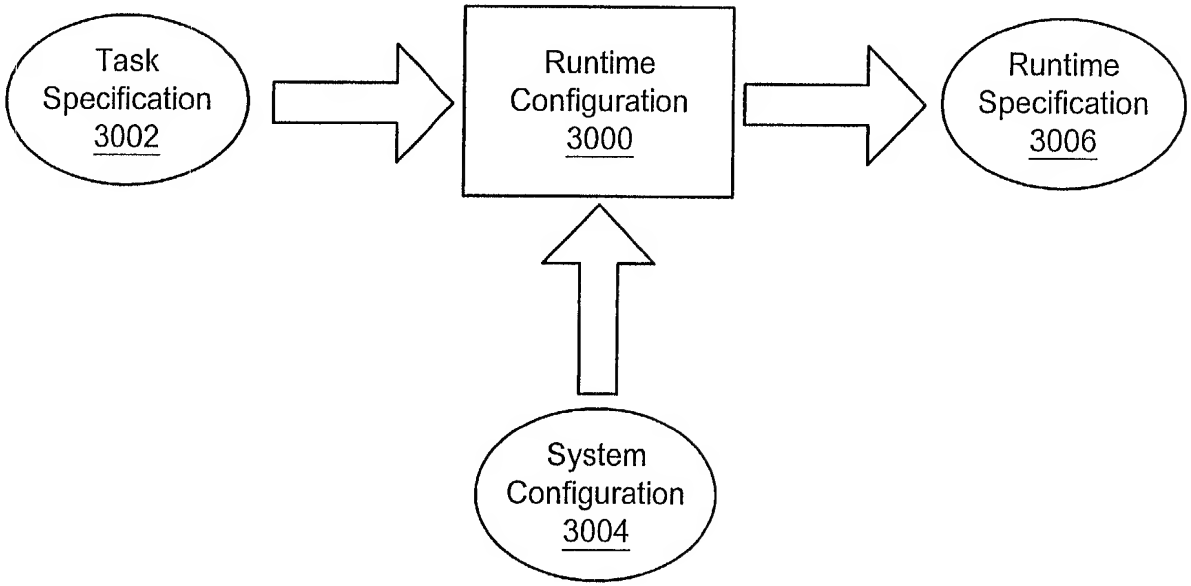

Task
Specification
3002
Runtime
Configuration
3000
Runtime
Specification
3006
System
Configuration
3004

Figure 30

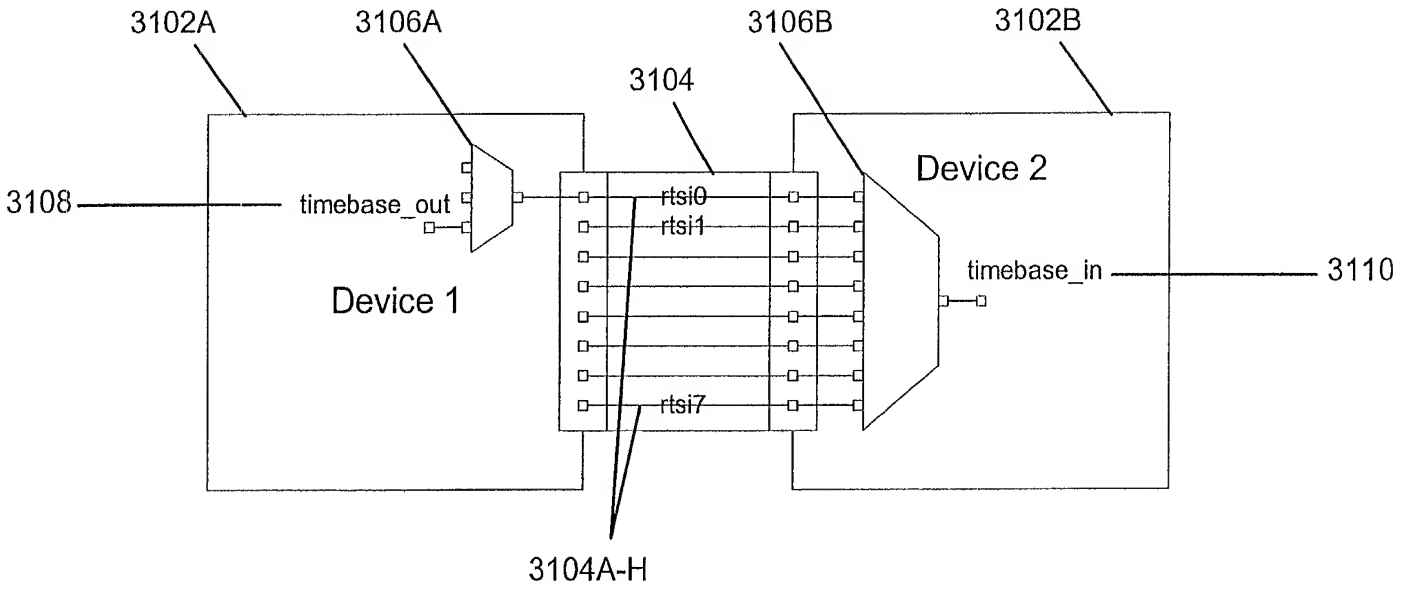

3102A
3106A
3104
3106B
3102B
3108
timebase_out
Device 1
rtsi0
rtsi1
rtsi7
Device 2
timebase_in
3110
3104A-H

Figure 31

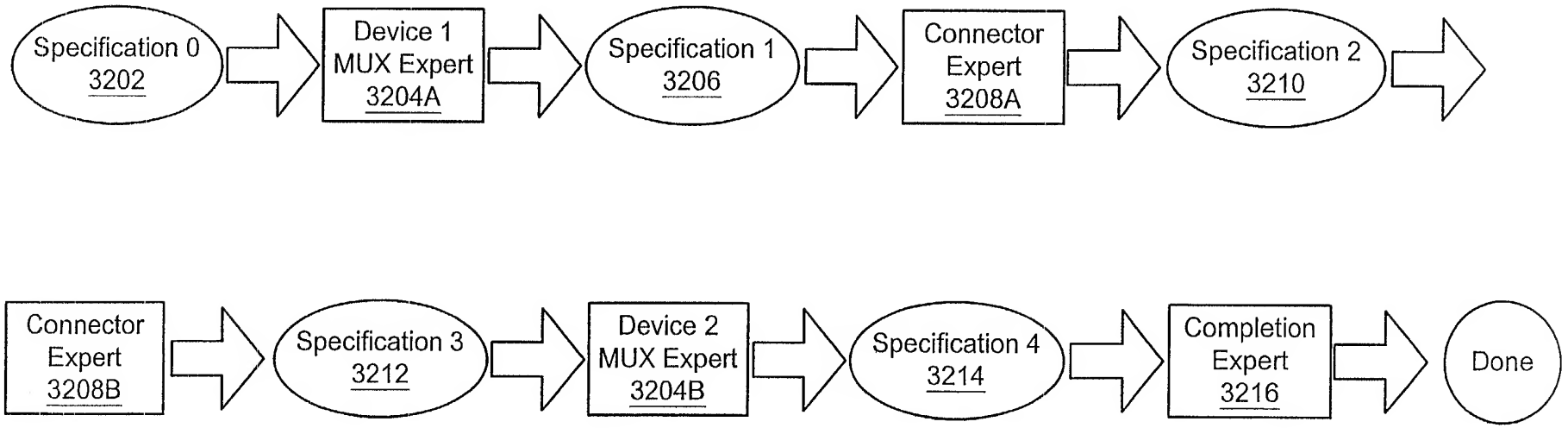

Specification 0
3202
Device 1
MUX Expert
3204A
Specification 1
3206
Connector
Expert
3208A
Specification 2
3210
Connector
Expert
3208B
Specification 3
3212
Device 2
MUX Expert
3204B
Specification 4
3214
Completion
Expert
3216
Done

Figure 32

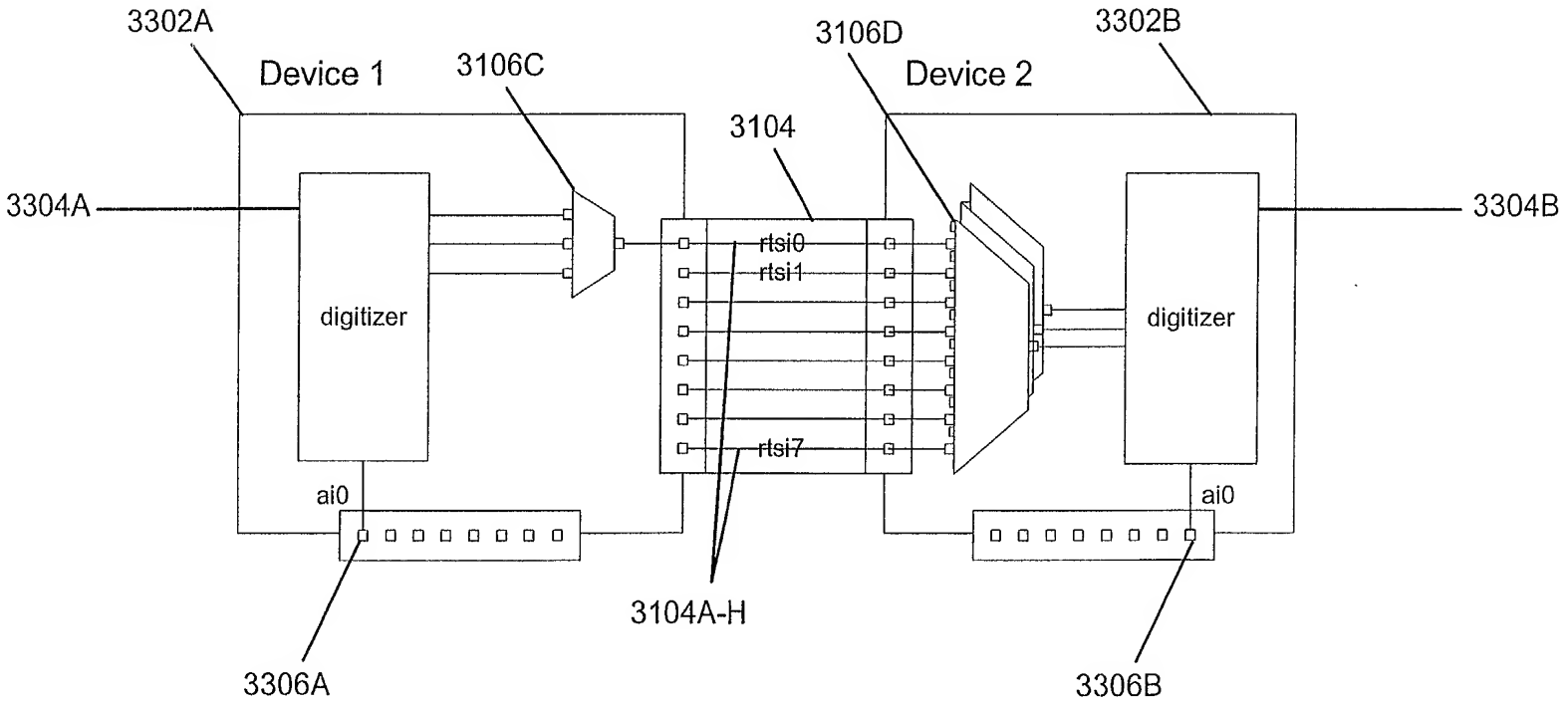

3302A
Device 1
3106C
3106D
Device 2
3302B
3104
3304A
3304B
digitizer
digitizer
rtsi0
rtsi1
rtsi7
ai0
ai0
3104A-H
3306A
3306B

Figure 33

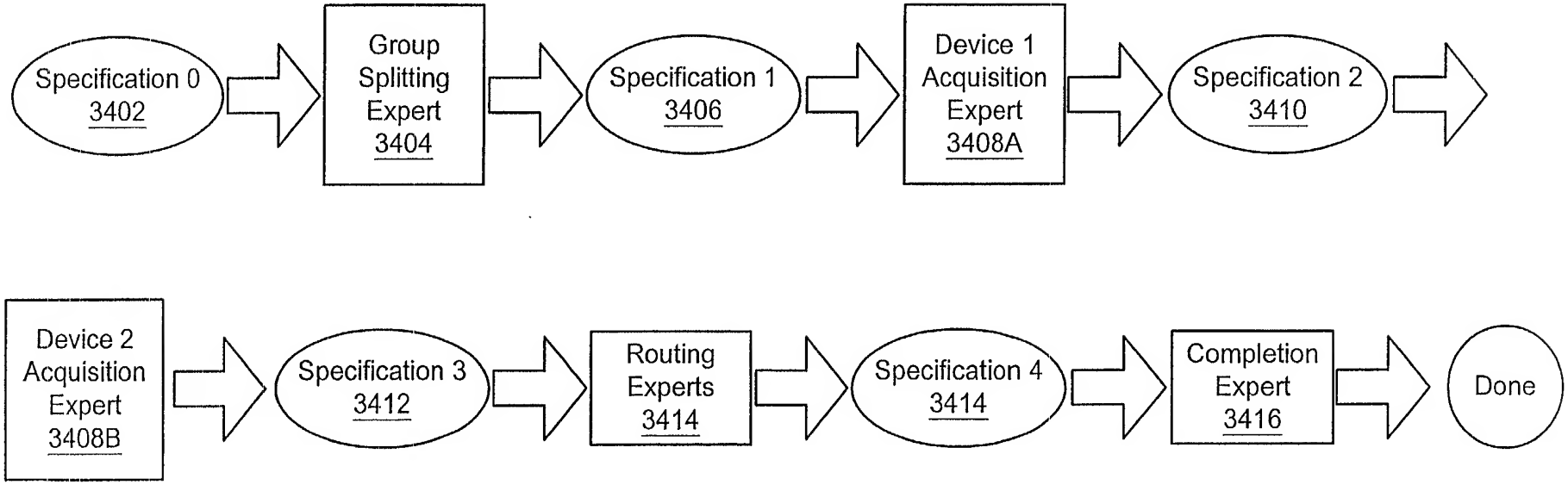

Specification 0
3402
Group
Splitting
Expert
3404
Specification 1
3406
Device 1
Acquisition
Expert
3408A
Specification 2
3410
Device 2
Acquisition
Expert
3408B
Specification 3
3412
Routing
Experts
3414
Specification 4
3414
Completion
Expert
3416
Done

Figure 34

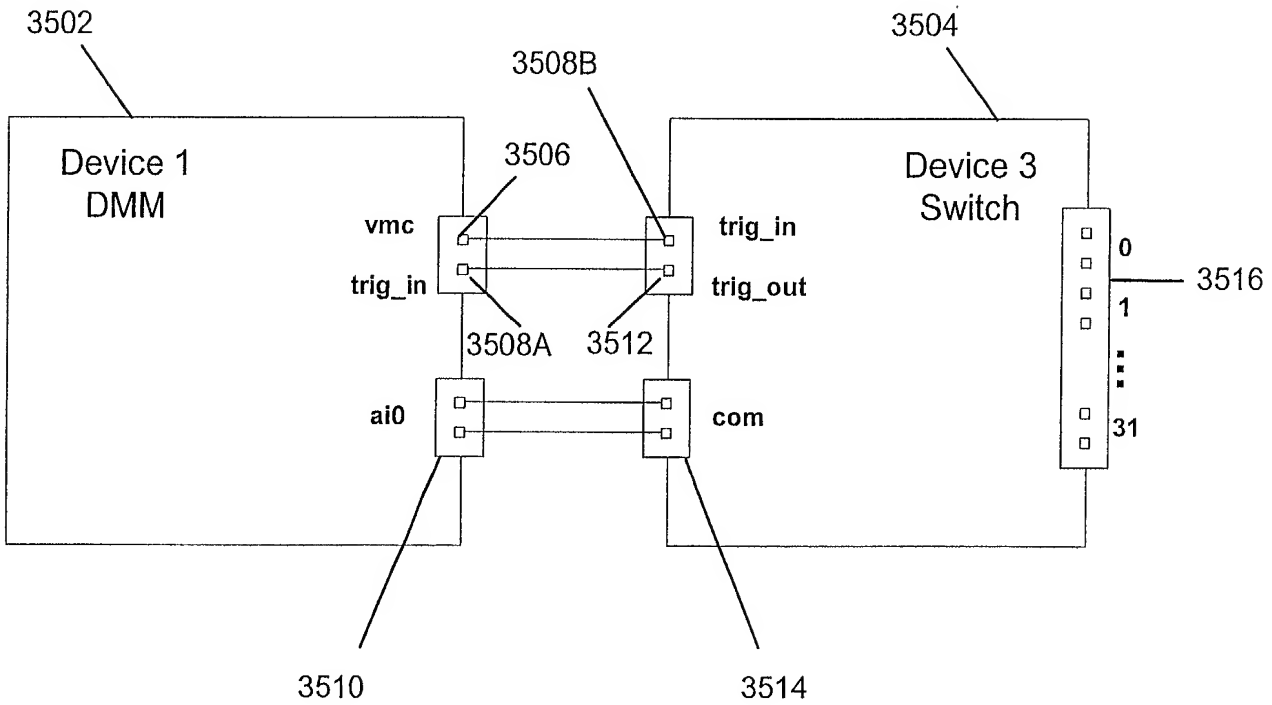

3502
3504
3508B
3506
Device 1
DMM
Device 3
Switch
vmc
trig_in
trig_in
trig_out
0
1
31
3516
3508A
3512
ai0
com
3510
3514

Figure 35

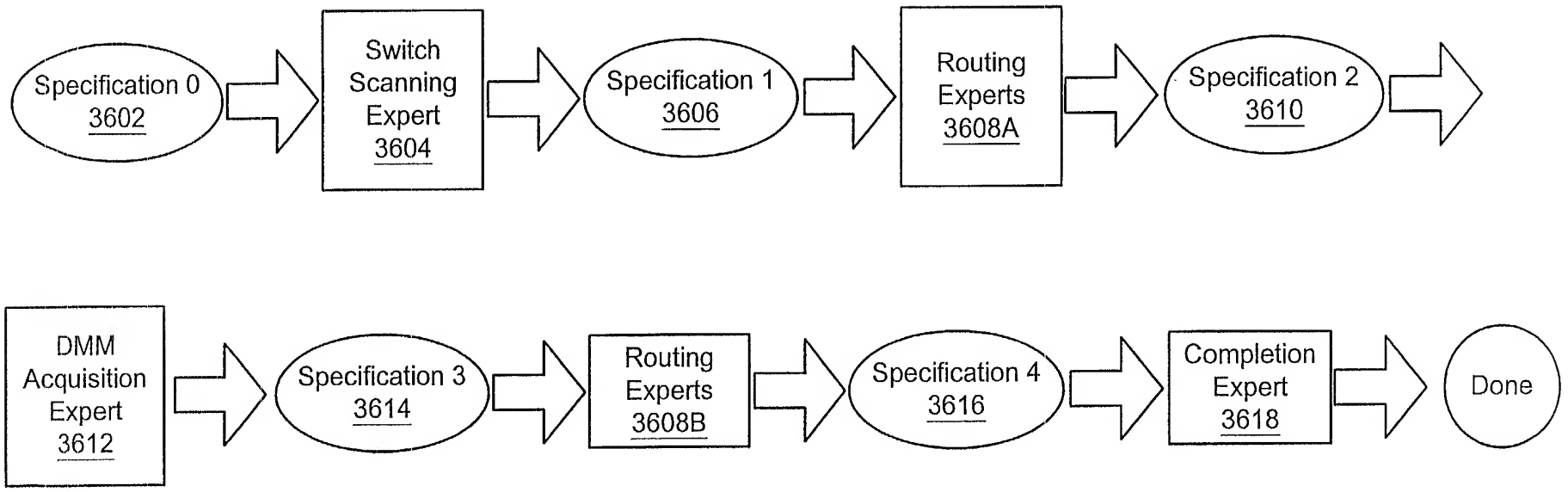

Specification 0
3602
Switch
Scanning
Expert
3604
Specification 1
3606
Routing
Experts
3608A
Specification 2
3610
DMM
Acquisition
Expert
3612
Specification 3
3614
Routing
Experts
3608B
Specification 4
3616
Completion
Expert
3618
Done

Figure 36

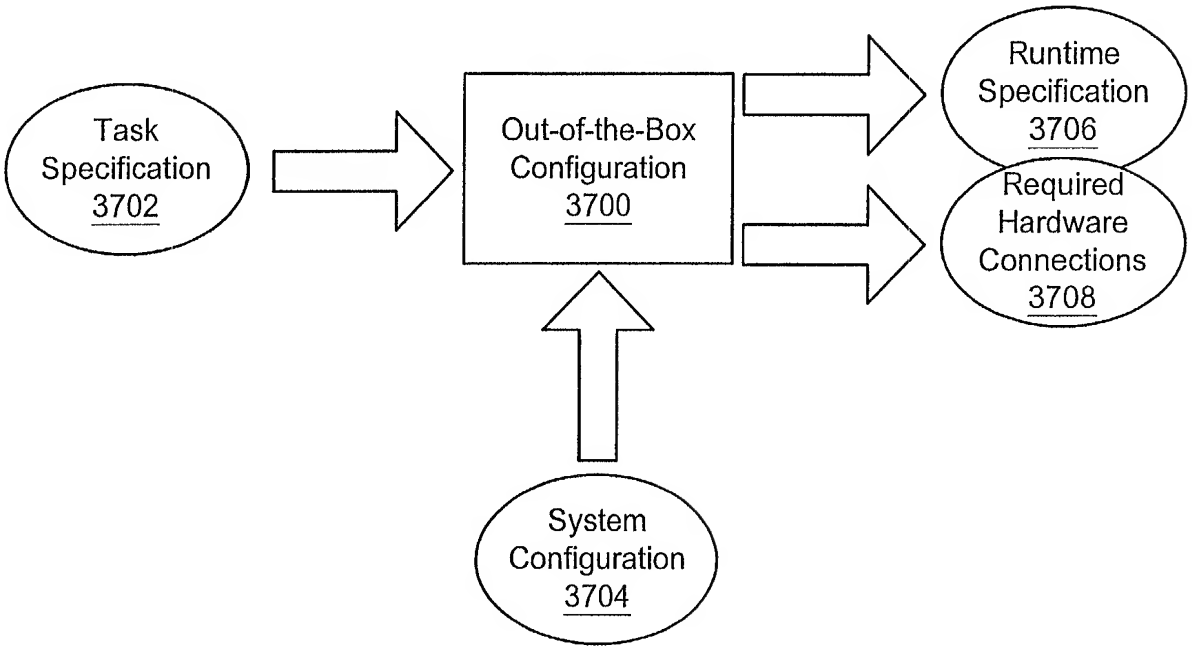

Task
Specification
3702
Out-of-the-Box
Configuration
3700
Runtime
Specification
3706
Required
Hardware
Connections
3708
System
Configuration
3704

Figure 37

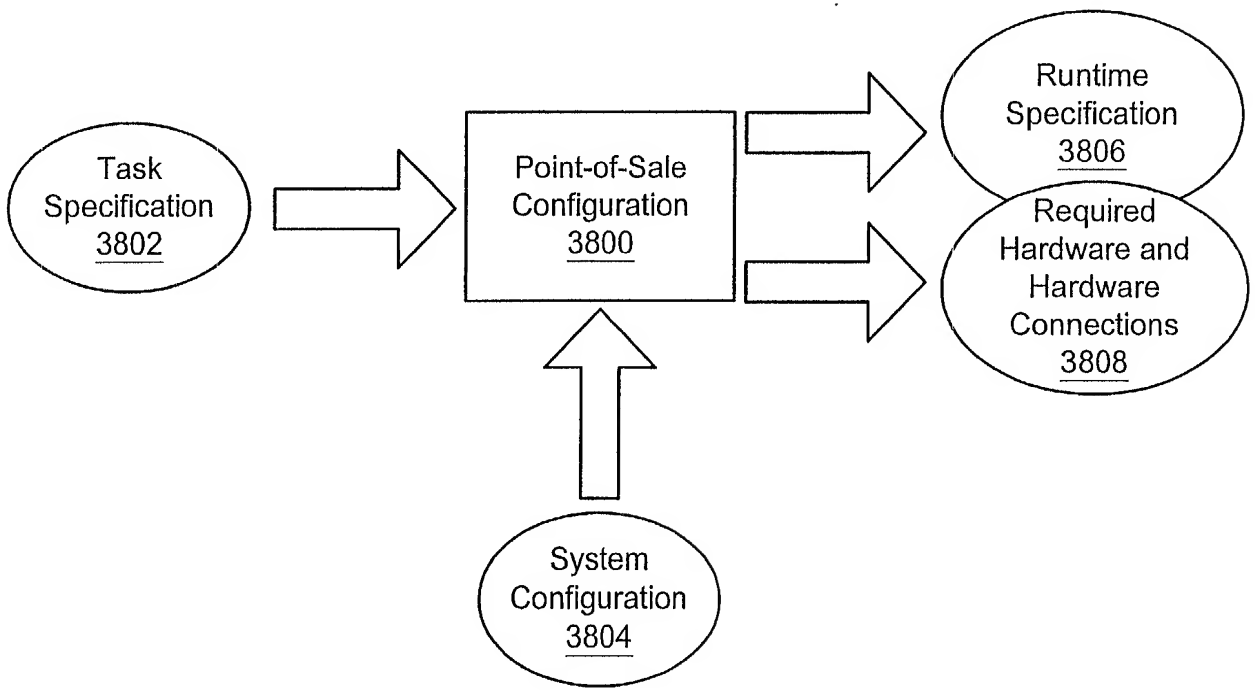
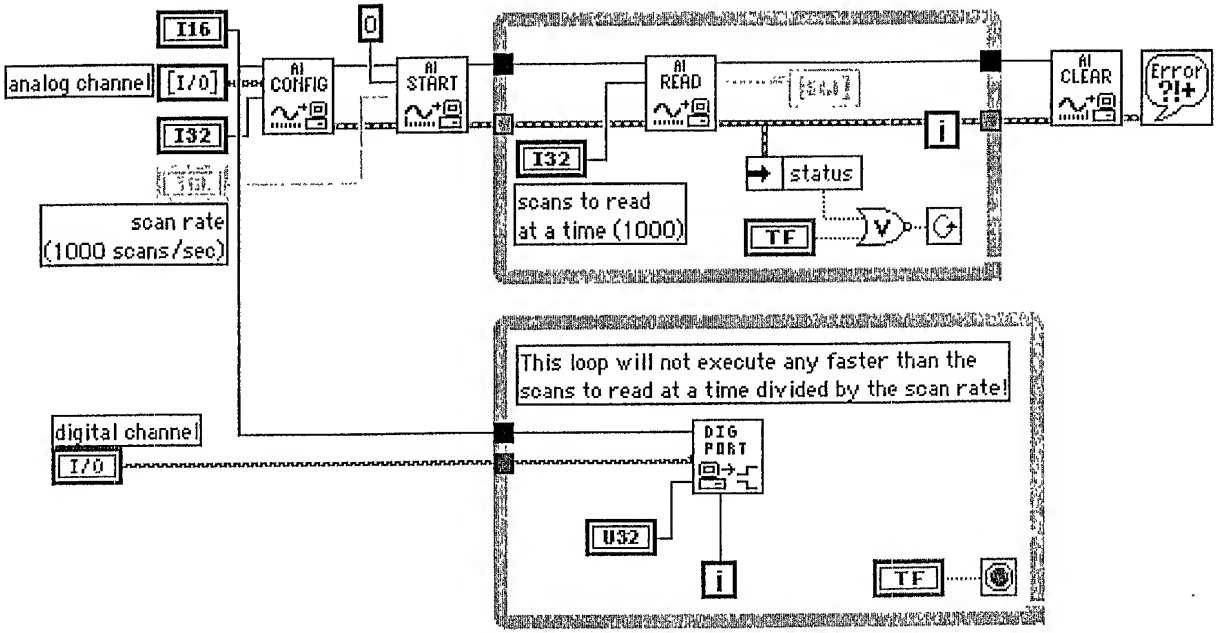
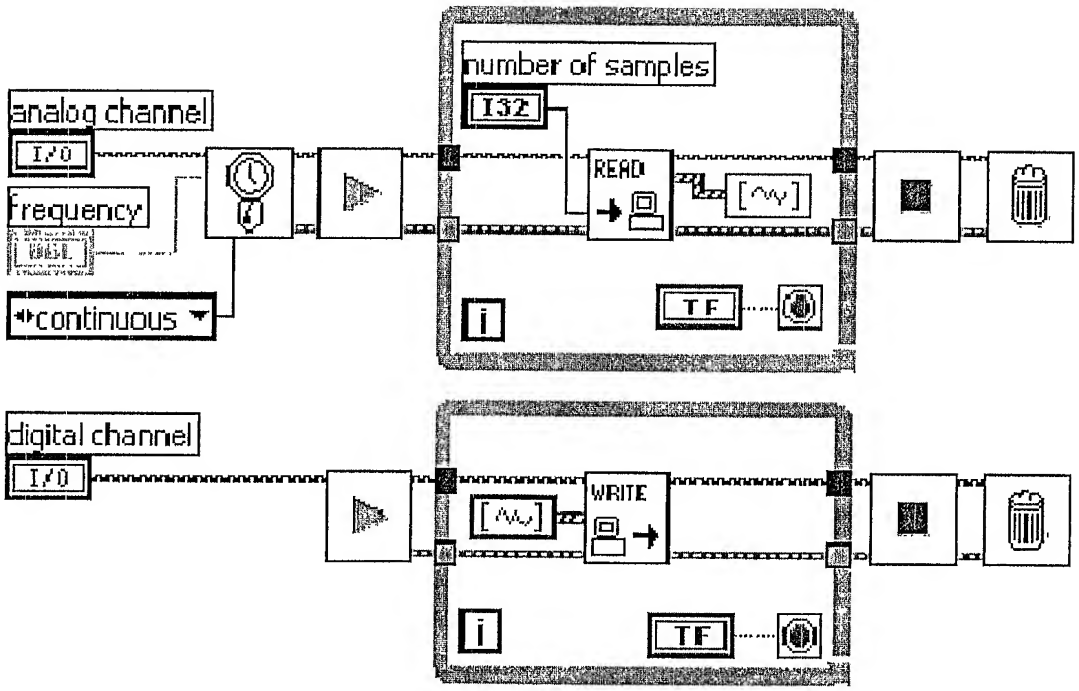

Task
Specification
3802
Point-of-Sale
Configuration
3800
Runtime
Specification
3806
Required
Hardware and
Hardware
Connections
3808
System
Configuration
3804

Figure 38



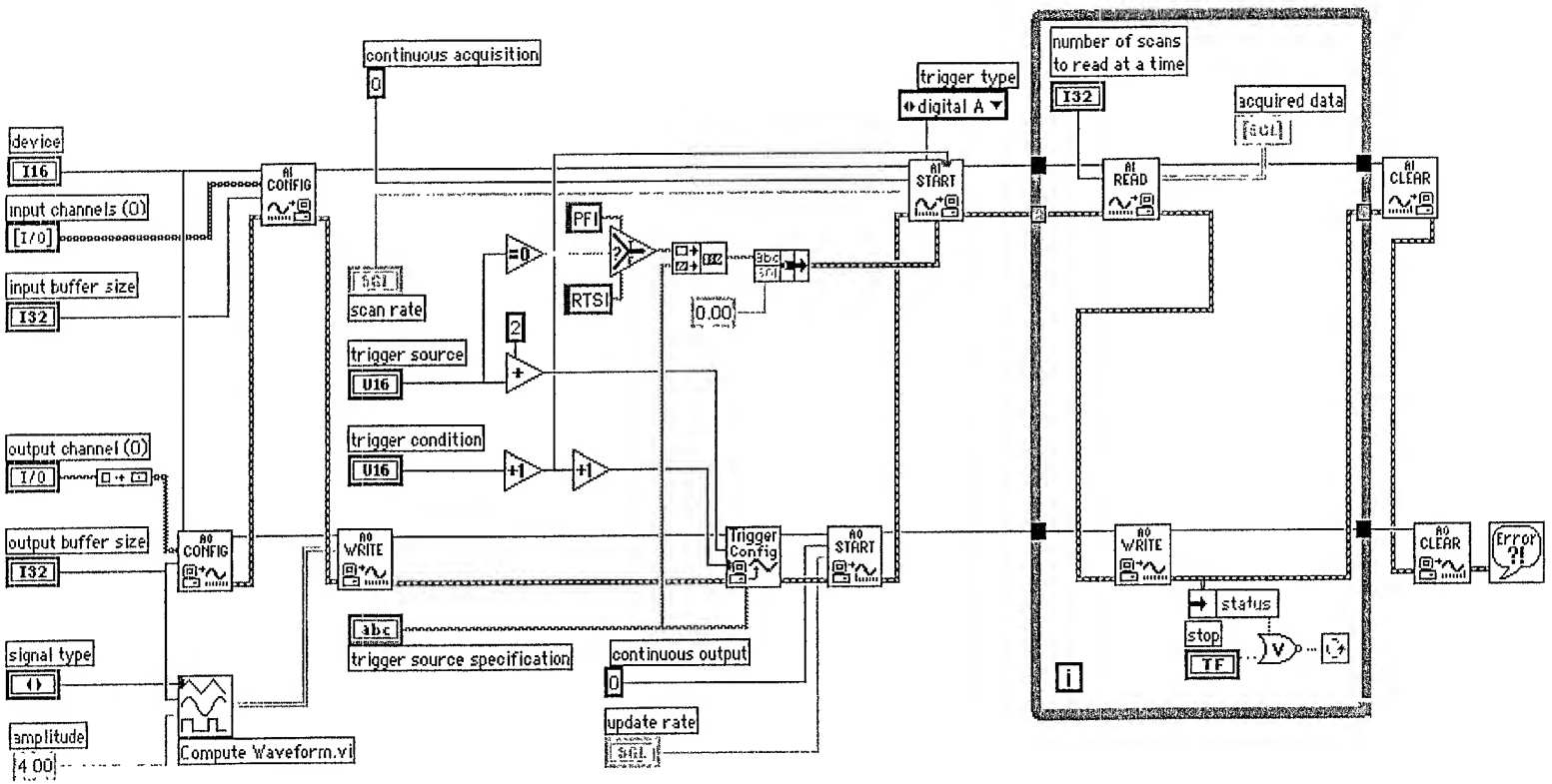
Simultaneous Buffered Analog Input And Single Point Digital Output With Single-Threaded Driver (Prior Art)

Figure 39A (Prior Art)



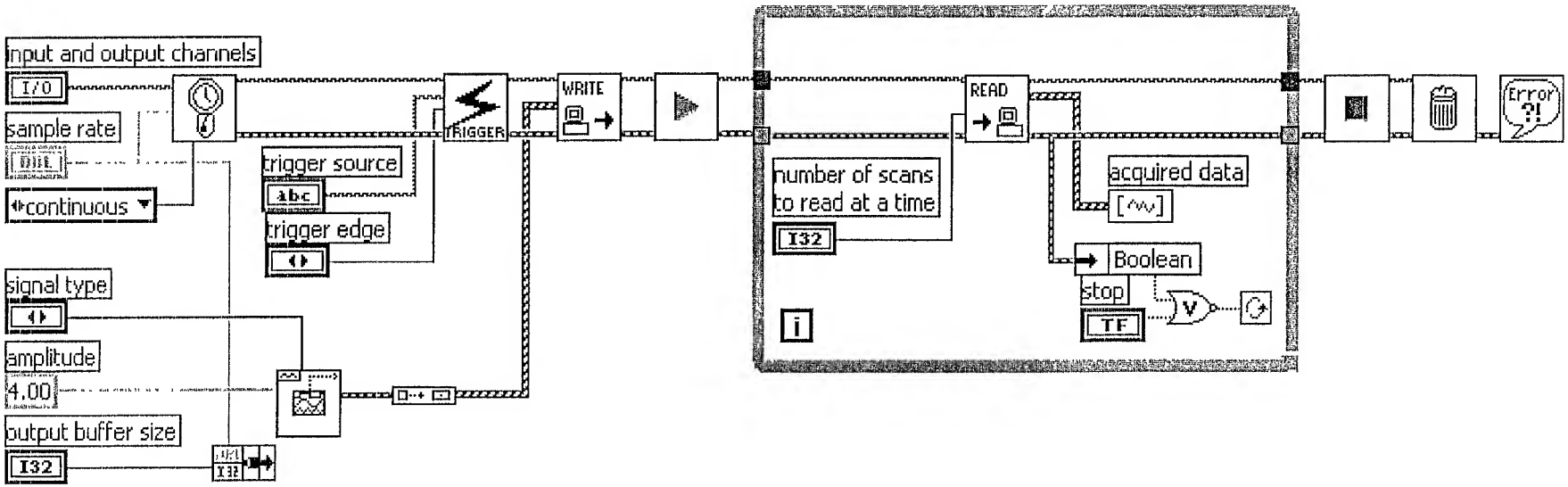
Simultaneous Buffered Analog Input And Single Point Digital Output With Multi-Threaded Driver

Figure 39B



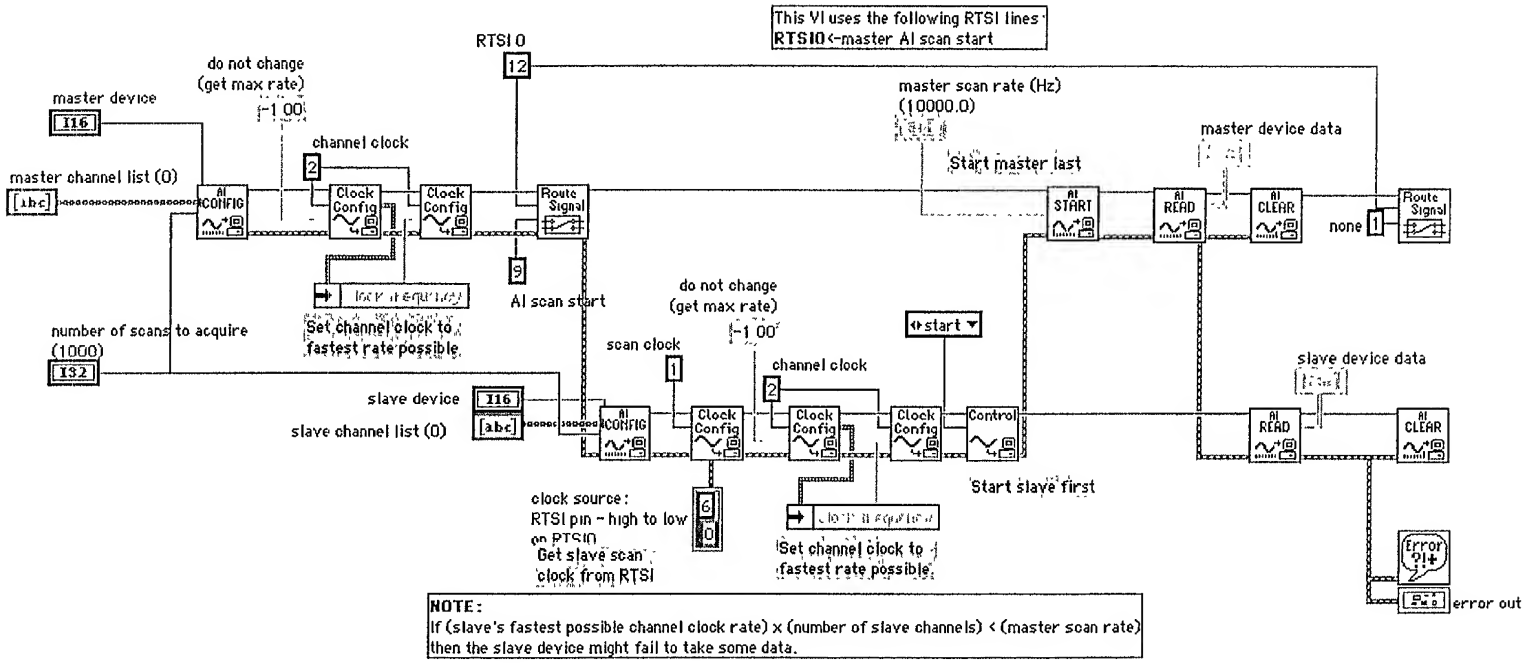
Simultaneous Triggered Buffered AI/AO (Prior Art)

Figure 40A



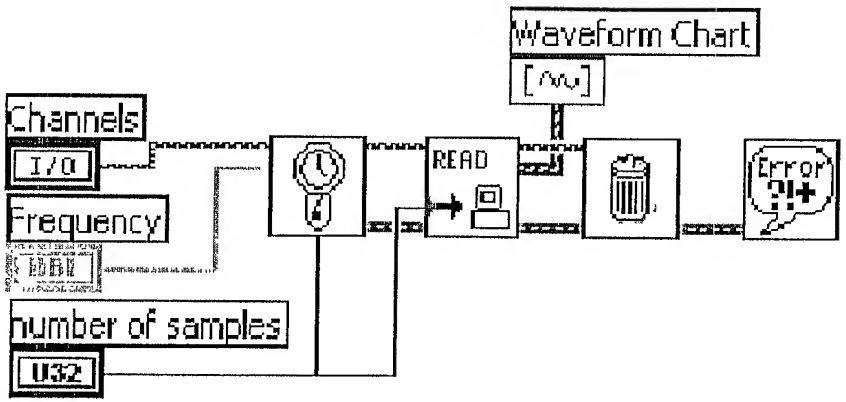
Simultaneous Triggered Buffered AI/AO

Figure 40B



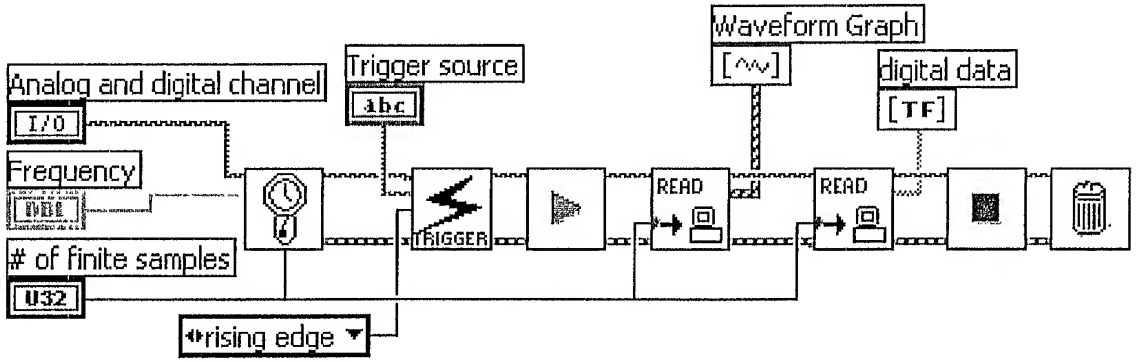
Sharing Scan Clock Across Two E-Series Devices (Prior Art)

Figure 41A



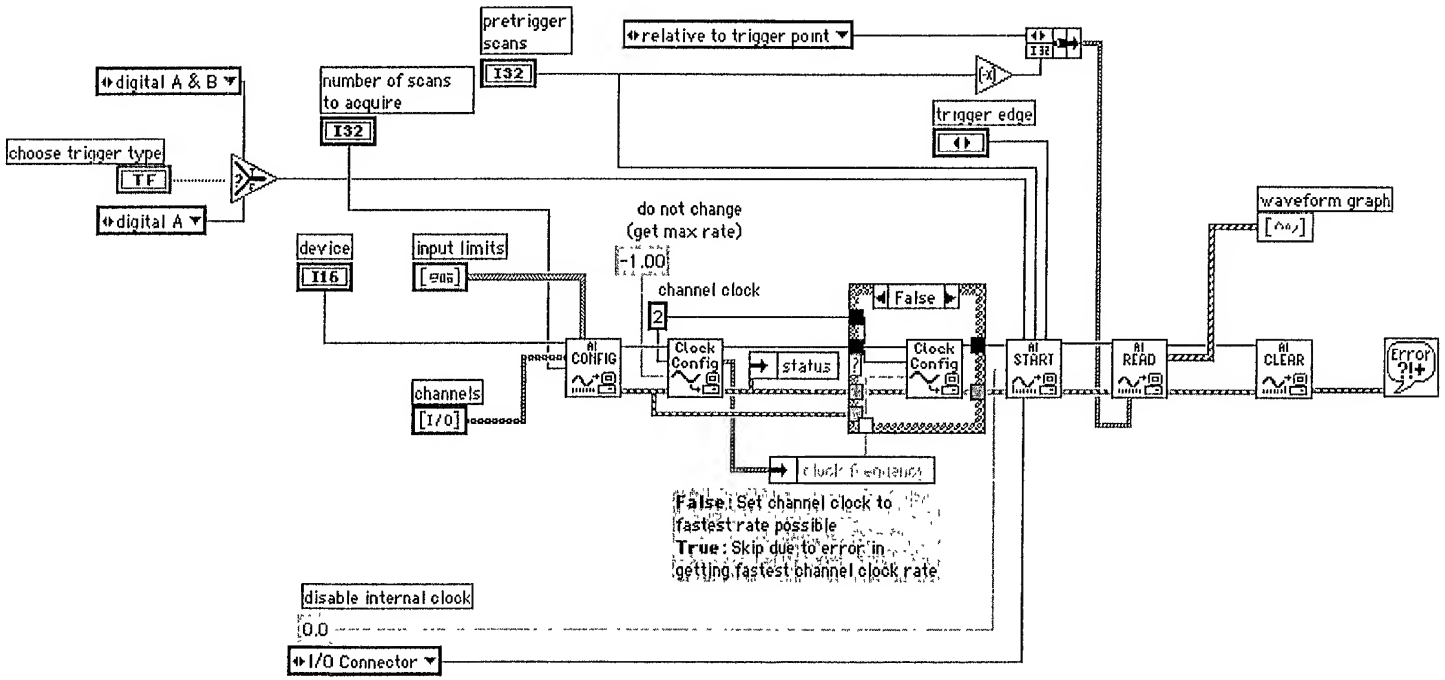
Sharing Scan Clock Across Two E-Series Devices

Figure 41B



Sharing Clock And Trigger, Buffered AI & DI

Figure 42



Acquire N Scans External Scan Clock Digital Trigger (Prior Art)

Figure 43A (Prior Art)

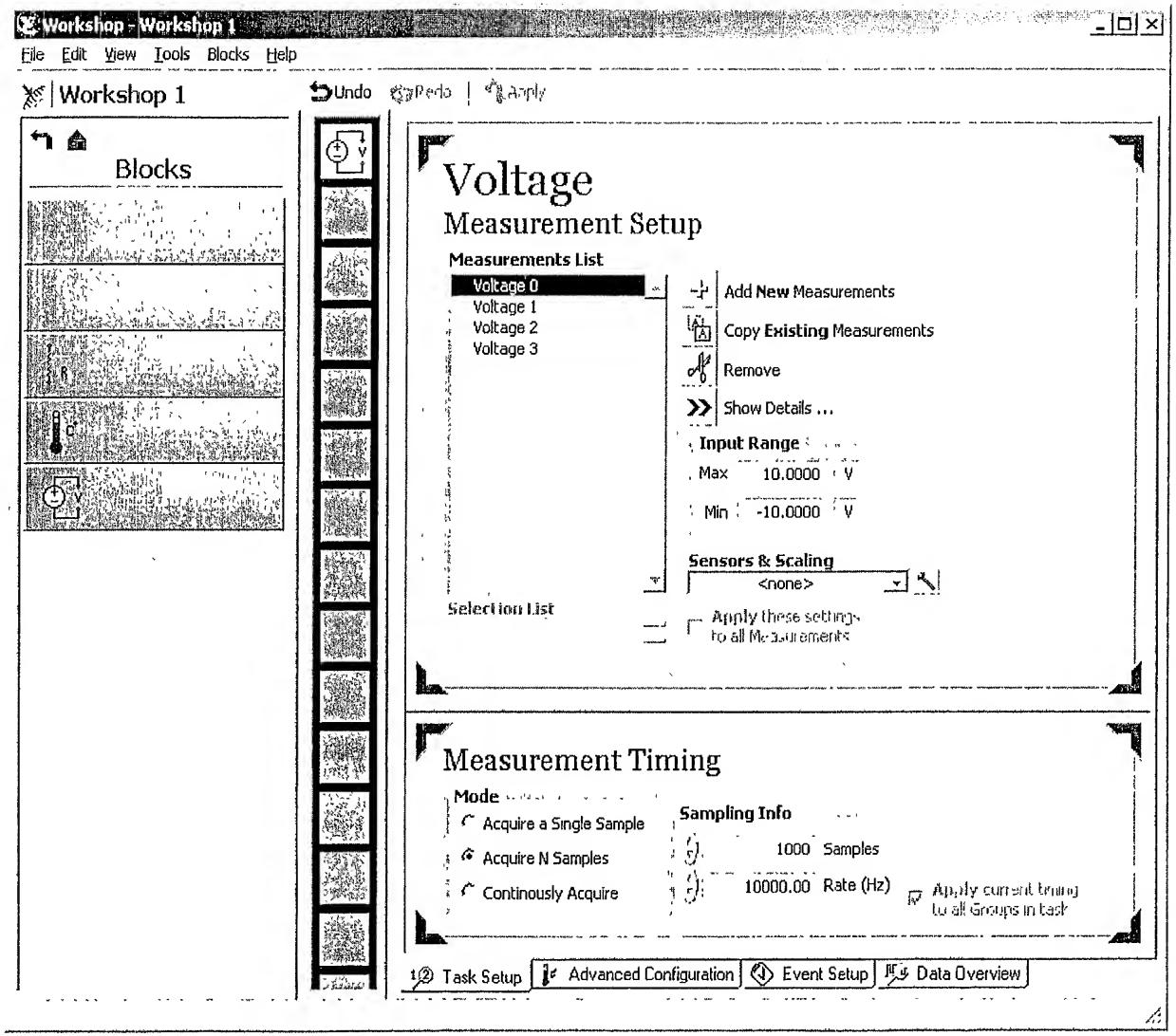

Workshop - Workshop 1
File Edit View Tools Blocks Help
Workshop 1
Undo
Redo
Apply
Blocks
Voltage
Measurement Setup
Measurements List
Voltage 0
Voltage 1
Voltage 2
Voltage 3
Add New Measurements
Copy Existing Measurements
Remove
Show Details ...
Input Range
Max 10.0000 V
Min -10.0000 V
Sensors & Scaling
<none>
Selection List
Apply these settings to all Measurements
Measurement Timing
Mode
Acquire a Single Sample
Acquire N Samples
Continously Acquire
Sampling Info
1000 Samples
10000.00 Rate (Hz)
Apply current timing to all Groups in task
Task Setup
Advanced Configuration
Event Setup
Data Overview

Figure 43B

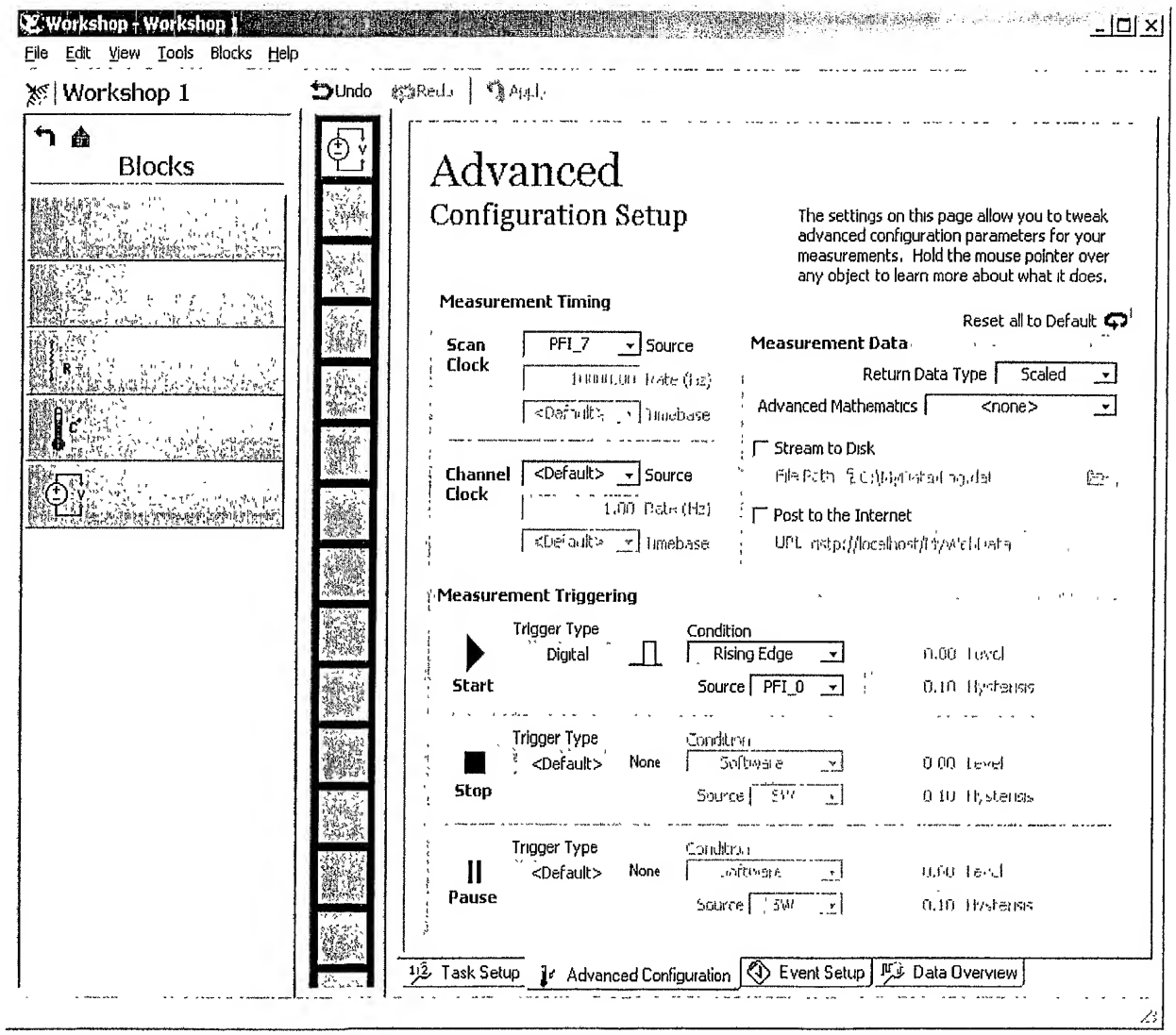
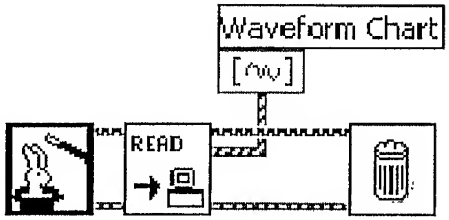
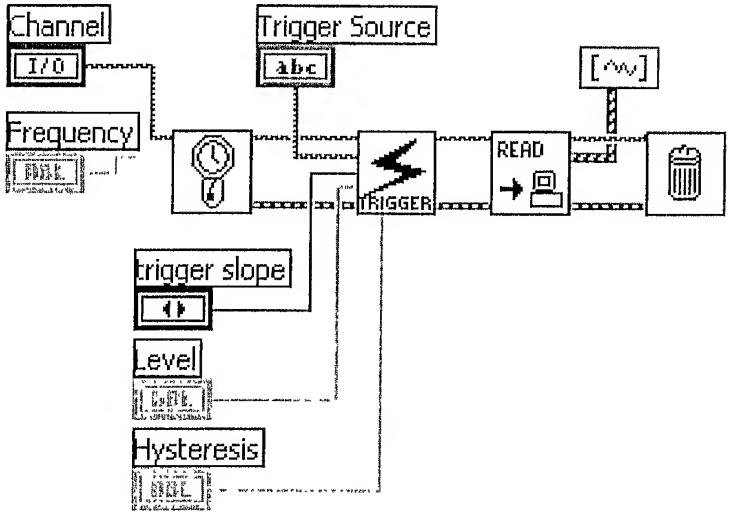

Workshop - Workshop 1
File Edit View Tools Blocks Help
Workshop 1
Undo
Redo
Apply
Blocks
Advanced
Configuration Setup
The settings on this page allow you to tweak advanced configuration parameters for your measurements. Hold the mouse pointer over any object to learn more about what it does.
Measurement Timing
Reset all to Default
Scan Clock
PFI_7
Source
Rate (Hz)
Timebase
Channel Clock
<Default>
Source
1.00
Rate (Hz)
Timebase
Measurement Data
Return Data Type
Scaled
Advanced Mathematics
<none>
Stream to Disk
File Path
Post to the Internet
URL
Measurement Triggering
Start
Trigger Type
Digital
Condition
Rising Edge
Source
PFI_0
0.00
Level
0.10
Hysteresis
Stop
Trigger Type
<Default>
None
Condition
Software
Source
SW
0.00
Level
0.10
Hysteresis
Pause
Trigger Type
<Default>
None
Condition
Software
Source
SW
0.00
Level
0.10
Hysteresis
Task Setup
Advanced Configuration
Event Setup
Data Overview

Figure 43C



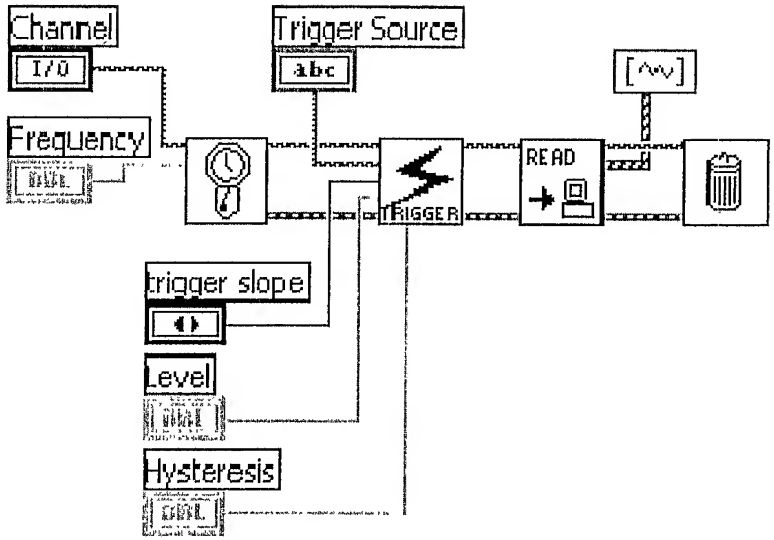
Acquire N Scans External Scan Clock Digital Trigger

Figure 43D



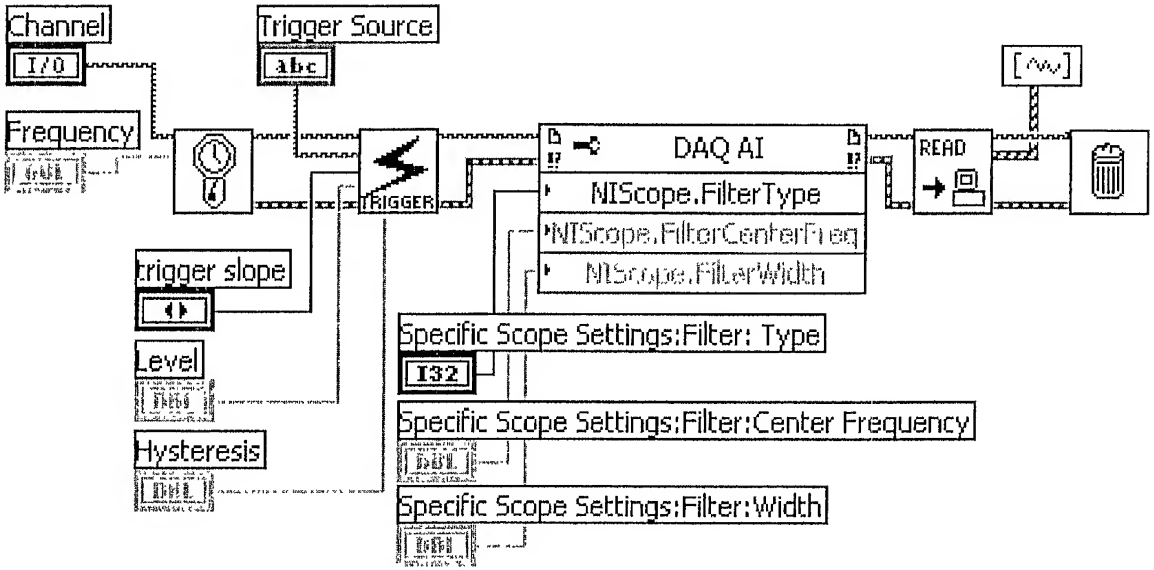
Triggered Acquisition With E-Series Device

Figure 44A



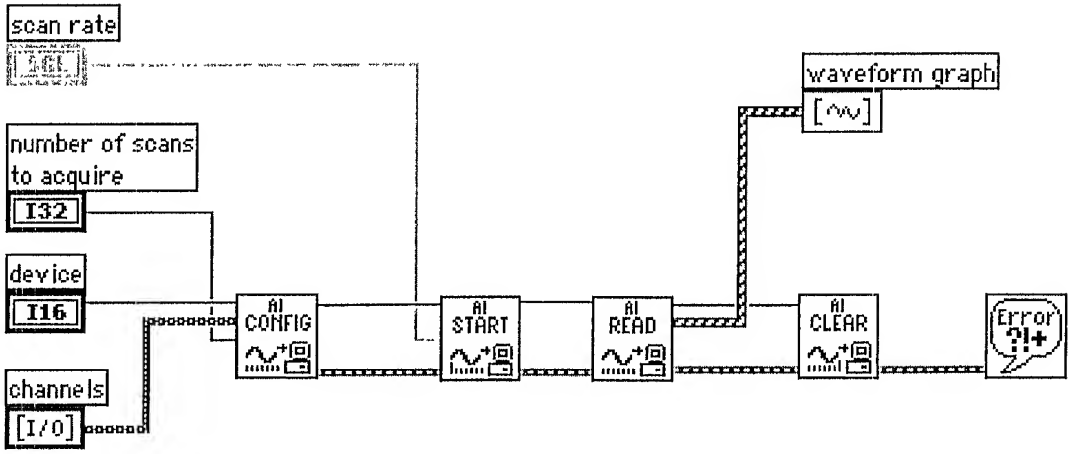
Triggered Acquisition With High Speed Digitizer

Figure 44B



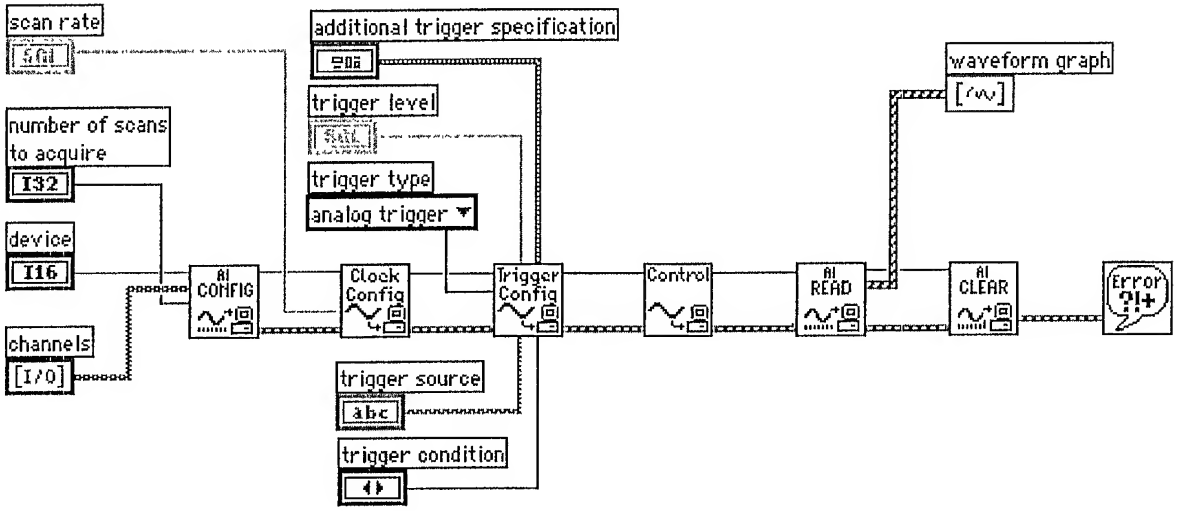
Triggered Acquisition With High Speed Digitizer With Filtering

Figure 44C



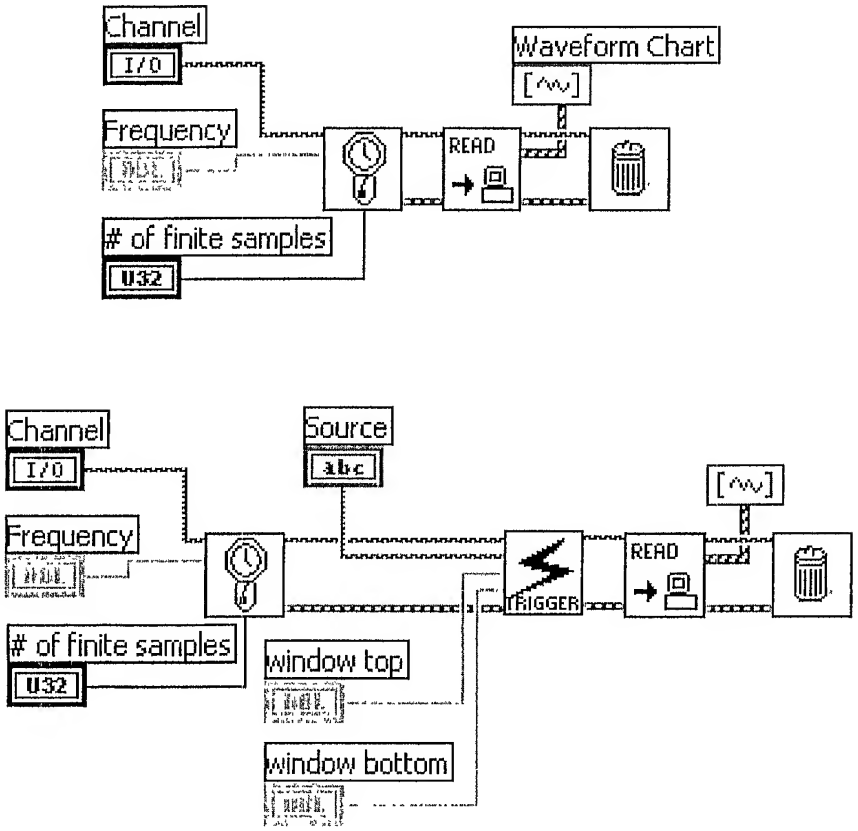
Intermediate Layer (Prior Art)

Figure 45A



Changes For Analog Window Triggering (Prior Art)

Figure 45B



Analog Window Triggering

Figure 45C